Acknowledgements

Imperial County Transportation Commission (ICTC)
David Salgado

Southern California Association of Governments (SCAG)
Rye Baerg
Tomas Olivas

Subconsultant Team:

Transpo Group
Ryan Snyder
Melody Wu

Katherine Padilla & Associates
Katherine Padilla-Otanez
Thelma Herrera
Vincent Zatzueta

Stantec
Rock Miller
Ramesh Gupta
Melissa Dugan
Cathy Lawrence
Jonathan Delgado

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1. Introduction

Imperial County has embarked on an effort to improve transportation safety at all of its public schools. A California State Department of Transportation (Caltrans) grant, in partnership with the Southern California Association of Governments (SCAG), was awarded to the Imperial County Transportation Commission (ICTC) to create a countywide Safe Routes to School (SRTS) Plan (the Plan). The Plan includes results of public workshops where local stakeholders identified safety issues and other barriers that discourage more students from walking or bicycling to the schools in Imperial County. It also includes a plan for each school to make engineering improvements to the most important location as was identified by stakeholders. These improvements range from intersection modification to new sidewalks or bikeways. This Plan details work completed thus far and future steps.

The Plan provides a roadmap for physical improvements and programs for implementation of physical modifications to the street and an enactment of programs. There are two primary purposes for SRTS plans:

1. To make it safer for students to walk and bicycle to school
2. To increase the number of students walking and bicycling to school

In addition to safety benefits, there are health benefits for students who walk and bike to school. Environmental benefits result as fewer parents drive their children to school every day. Additionally, as children and families adopt more active lifestyles, their quality of life increases, they have more free time from driving less, and community relationships are strengthened. All of these benefits combine to create more livable neighborhoods surrounding schools where children walk or bike to school.

The Imperial County Public Health Department (ICPHD) served as a key partner in the process to develop and implement the Plan. The Plan follows earlier efforts by ICPHD to spearheaded SRTS efforts in Imperial County over the last several years. Previous efforts by ICPHD include:

- Completed SRTS surveys at selected schools.
- A SRTS workshop conducted by the California Department of Public Health as part of National Walk to School Day in 2013.
- Supporting the San Pasqual Valley Unified School District in producing a SRTS Plan in 2011 to use as the basis for funding applications and the beginning of programs.

As part of the current Plan, the schools conducted surveys to obtain information from parents about their children’s trip to and from school, including perceptions of safety, traffic conditions, and parents’ opinions regarding whether walking and bicycling to school is appropriate for their child.

The Plan was initiated in March of 2015 when a consultant team was brought on to conduct the core work. The consultant team coordinated the Plan development, including contacting each of the school districts and schools, setting up and facilitating workshops together to gather key information, circulating surveys, and developing the SRTS Plan.

A nationally certified SRTS instructor from the consultant team facilitated the SRTS workshops in each school district. The workshops began with a presentation that described why SRTS is important, along with a sampling of engineering devices that can be applied to make walking and bicycling safer. The presentation also included information about the programmatic components: education, encouragement, enforcement and evaluation. After the presentation, stakeholder attendees drew on large-scale maps of their schools and the surrounding areas. Each group marked common walking and cycling routes to their school and identified key issues and locations needing improvement. They identified general safety issues, as well as location-specific safety issues. The groups then identified their number one location-specific concern at each of
the schools. These led to the creation of SRTS plans for each school. As part of the workshops the SRTS instructor also collected information regarding the types of education, encouragement and enforcement programs the schools currently carry out, and might like to enact in the future. Attendees also discussed the importance of forming SRTS committees to manage the programs.

Following the workshop, the consultant team conducted fieldwork for each of school’s number one location-specific concern to provide engineering recommendations. This can be found under the “Existing Conditions and Engineering Recommendations” section in each school’s SRTS plan.

This Plan contains a program for a “5 E” approach to making walking and bicycling safer and more attractive to Imperial County’s students and parents. The 5Es include the following:

- **Engineering**—to make physical improvements to the routes that students use to walk or bicycle to school
- **Education**—to teach students safe walking and bicycling habits, to teach parents the importance of safe driving habits, and to emphasize health and environmental benefits
- **Encouragement**—to promote walking and bicycling to school so more students choose to do so
- **Enforcement**—to ensure that rules and laws of the road are followed, as well as safe pick-up and drop-off practices are adhered to at the schools
- **Evaluation**—to track the Plan to assess its success and to modify it accordingly.

Experience shows that this approach yields successful results in both making our communities safer to walk and bicycle in, and increasing the number of students doing so.
2. Planning Context

Some of the improvement locations listed in this Plan coincide with work conducted for other planning efforts. This Plan compliments and expands upon these previous efforts to create a well-connected network for pedestrians and bicyclists throughout the County.

Following is a brief summary of each of the County’s respective non-motorized transportation studies.

City of Brawley Non-Motorized Transportation Plan (NMTP) (2013)

The City of Brawley’s NMTP serves as a guiding document for a comprehensive pedestrian and bicycle network and an update to the existing 2002 Bicycle Master Plan. The purpose is to improve the overall safety and enhance multi-modal connections through a well-established pedestrian and bicycle network.

For an estimated cost of $6,137,500, 46 miles of bikeways are proposed to emphasize connectivity to key destinations, including schools, activity centers and residential areas. This includes 6 miles of Class I bike paths, 22.5 miles of Class II bike lanes, and 17.5 miles of Class III bike route facilities. The plan also proposes pedestrian networking improvements, including sidewalk infill projects, intersection improvements, streetscape enhancements, suggested routes to schools, and traffic calming recommendations. The cost estimates for these pedestrian improvements total to $6,064,000.

Imperial County Bicycle Master Plan (2012)

The County of Imperial’s Bicycle Master Plan aims to create an integrated network of bicycle facilities and programs for the unincorporated areas of the County. The purpose of this Plan is to expand on the existing network spelled out in the 2003 Countywide Plan in order to qualify for state and federal funding for implementation.

The Plan recommends approximately 270 miles of on-street bikeways (Class II bike lanes and Class III bike routes), 63.8 miles of off-street Class I bike paths, and 102.9 miles of Class III bike routes along shoulders of state highways. The Plan provides a detailed prioritization strategy for implementation and estimates a total cost for the bikeway network (not including the Class III bike routes along state highways) to be $68,291,000. At full build out, the County of Imperial will have over 435 miles of proposed bikeways to improve connections between key destinations, as well as the incorporated cities and the more rural unincorporated areas of the County.

San Pasqual Unified School District’s Fort Yuma Safe Routes to School Project (2011)

The San Pasqual Valley Unified School District produced a Safe Routes to School (SRTS) plan in 2011 called the “Fort Yuma Safe Routes to School Project”. This project proposes a comprehensive “5E” approach—engineering, education, encouragement, enforcement and evaluation—to make walking and bicycling safer and more attractive around the school. A SRTS Committee was formed to carry out the programs.

City of El Centro Bicycle Master Plan (2010)

The 2010 City of El Centro Bicycle Master Plan is an update to the 2000 Master Plan. The purpose of this Plan is to create continuous and interconnected bicycle facility links to the County of Imperial’s regional and proposed network. It serves as the basis for applying for federal funding for the implementation of the Plan.
The Plan examines existing facilities, bicycle needs assessment, recommended bicycle network, funding costs and a phased implementation strategy. This Plan recommends the implementation of 20.60 miles of bicycle facilities for an estimated cost of $5,181,521. The plan includes 5.9 miles of Class I bike paths, 5.5 miles of Class II bike lanes, and 9.2 miles of Class III bike route facilities. Developers will construct an additional 27.3 miles of bike routes. These facilities will provide strong connections to local destinations and surrounding areas.

**County of Imperial Bicycle Master Plan (2003)**

The previous County of Imperial Bicycle Master Plan includes summaries of the existing and proposed bicycle facilities for the Holtville Bicycle Master Plan (2008), City of Imperial Bicycle Master Plan (2003), Calexico Bicycle Master Plan (2002), Westmorland Bicycle Master Plan (2002), and Calipatria Bicycle Master Plan. The City of Holtville has prioritized approximately 10.35 miles of bikeways at an estimated cost of $932,460. A complete document for the cities of Imperial, Calexico, Westmorland, and Calipatria were not available for review as of the publication of this report.
3. Evaluation

In the first months of the planning process, baseline surveys were taken to learn about existing commute to school patterns. As the Plan’s programs unfold, they should show increases in the number of students walking and bicycling. Since engineering improvements (physical modifications made to streets and intersections) will likely be made after this planning effort ends, initial increases in bicycling and walking will result from the programs alone. Further increases can be expected once the physical improvements are made.

Baseline Commute to School Tally

In Table B.1, the Baseline Commute to School Tally in Appendix B shows the results of a school tally conducted in the classrooms, where teachers ask their students how they got to school.

Parent Surveys

A more in depth parent survey was circulated. This questionnaire used the survey instrument, described in Appendix A, created by the National Center for Safe Routes to School. These surveys were passed out by teachers to each student to take home to their parents to gather information about current commute to school patterns, and the attitudes parents hold regarding permitting their children to walk or bicycle to school. This gave us further information regarding barriers preventing parents from allowing their children to walk or bicycle, as well as what might be done to alleviate those barriers. These surveys were conducted in English and Spanish.

Table 3.1. shows the parent responses for schools within the San Pasqual Union School District on how their children typical arrive and leave for school. Results for the remaining schools and school districts are displayed in the Table B.2 in Appendix B.

Table 3.1. Parent Survey Results – Typical Mode of Arrival At and Departure from School
(San Pasqual Valley Union School District Only)

<table>
<thead>
<tr>
<th>School</th>
<th>Morning (M); Afternoon (A)</th>
<th># of Trips</th>
<th>Walk %</th>
<th>Bicycle %</th>
<th>School Bus %</th>
<th>Family Vehicle %</th>
<th>Carpool with Children of Other Family %</th>
<th>Imperial County Bus %</th>
<th>Other %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate</td>
<td>M</td>
<td>128</td>
<td>0.8</td>
<td>0</td>
<td>77</td>
<td>22</td>
<td>0</td>
<td>0.8</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>108</td>
<td>2</td>
<td>0.9</td>
<td>85</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>San Pasqual ES</td>
<td>M</td>
<td>114</td>
<td>0.9</td>
<td>0</td>
<td>75</td>
<td>24</td>
<td>0</td>
<td>0.9</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>97</td>
<td>2</td>
<td>1</td>
<td>86</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>San Pasqual MS</td>
<td>M</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>92</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>80</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>San Pasqual HS</td>
<td>M</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Parent Survey Results Summary

Based on parent survey results from all the schools in this Plan, a majority of students lived within 2 miles from their school, with 68% of children living within 1 mile of the school and 34% within ¼ mile.
A large majority of students were typically driven in a family vehicle to and from school, with 67% of students arriving and 61% departing from school in a car. Walking was the second highest mode of travel, with 18% of students walking to school in the morning and 23% of students walking home in the afternoon. Bicycling remained constant at 1% to and from school. These trends suggest that a portion of the students being driven to school in the morning may be walking back home in the afternoon.

Of the respondents that lived within ¼ mile, 37% of the students walked to school and 41% of students walked home; and 1% of the students biked to school and 2% biked home. 57% of students were still being dropped off and 54% were being picked up from school in a family vehicle within that ¼ mile distance. The percentage of trips in a family vehicle to and from school increases as the distance from home to school increases between ¼ mile to 2 miles. For distances greater than 2 miles, the percentage of trips in a car actually decreases slightly while the number of school bus trips is at its peak, with 31% of trips to school and 32% of trips from school.

The greatest barriers that prevent parents from encouraging their children to walk and bike to and from school include: (1) the speed of vehicular traffic [58%], (2) the safety at intersections and crossings [53%], (3) the distance from home to school [52%], and (4) the hot climate [50%].

Reducing the distance to and from school [57%] was identified as the top solution to alleviating children being driven and encouraging them to walk and bike. Addressing climate concerns [41%] and the safety of intersections and crossings [37%] were perceived as additional opportunities in promoting more walking and biking amongst children.

As a summary of overall survey perceptions, distance to and from school was identified as an opportunity but also a barrier that prevents parents from encouraging their students to walk and bike. The reported average walking trip in the region is ½ mile, or a ten-minute walk, but 67% of walking trips remain less than ¼ mile (SCAG RTP/SCS 2016). The parent survey trends also show the percentage of walking trips decreasing as distances beyond ¼-mile increase.

This Plan addresses concerns of distance and safety by improving walking and biking conditions adjacent to and within reasonable distance to the schools. While hot weather conditions were also perceived as a barrier, the Plan aims to encourage more walking and biking through physical improvements that increase the overall comfort and ease in getting to and from school.
4. Ongoing Programs

The recommendations that follow are the result of school and community outreach, background research, fieldwork, and experience for what makes effective Safe Routes to School programs. Throughout the outreach process, each school identified specific programs for education, encouragement, and enforcement that would work best for it. What follows here are programs the County could consider offering and implementing citywide, with the opportunity for each school to tailor the programs to its needs.

"Using a comprehensive “5 E” approach will allow the County to have the greatest impact and encourage more students to walk and bike to school. The Education programs will teach students, parents, and neighbors safe walking, bicycling, and driving habits, as well as the health and environment benefits of SRTS. The Encouragement programs aim to engage students, parents, school staff, and neighbors to promote walking and cycling to and from school. The Enforcement efforts seek to ensure that traffic laws and drop-off and pick-up procedures are followed. Evaluation tracks the program to assess what is effective and what might be modified. The Engineering improvements make physical changes to streets and intersections to remedy safety issues, and create a more comfortable environment for people walking and bicycling.

4.1. General Guide to Program Development

As the County develops each program, staff should keep in mind the following concepts recommended by the Pedestrian and Bicycle Information Center (PBIC):

1. **Make walking and bicycling “try-able.”** Give people a chance to try walking and bicycling instead of driving. This could be by organizing a group ride to school or providing route maps for a citywide walk event, etc.

2. **Communicate the behavior you want to see.** Bumper stickers, banners, signs, pamphlets, and public service announcements can all convey messages to encourage travel by foot or bicycle.

3. **Reward behavior.** Provide incentives and gifts to motivate people to try walking and bicycling for a trip. These strategies are especially effective for school children.

4. **Make it convenient.** Design pedestrian and bike-friendly places throughout the city; prioritize improvements to key destinations.

5. **Institutionalize support for walking and bicycling.** Strong policies that support walking and bicycling will help guide programs and ensure ideas have staying power.

6. **Capitalize on other agendas.** Make walking and bicycling part of the solution to a wider range of issues the community faces, such as obesity, health, environmental concerns, and economic development.
4.2. Education

Educational programs should be tailored to specific audiences in order to effectively address the behaviors the programs seek to modify. For example, a child bicyclist will need different education on how to ride compared to an adult bicyclist. Similarly, different messaging will resonate with teen drivers than adult drivers. The most common audiences that will benefit from education programs include:

- Road users—bicyclists, pedestrians (children, teens, adults, parents, neighbors, seniors), and drivers (young, adult, older)
- Commuters and employers
- Officials and policy makers—engineers, planners, council members, law enforcement
- Students
- Teachers
- Neighbors
- Visitors

For each group, the County should consider when and how the audience should receive the information, and the demographic factors that may affect how the audience understands and perceives the information. Descriptions of educational campaigns and programs that were prioritized during the SRTS outreach process are detailed below.

Table 4.2. Education Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Implementation Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycle rodeo</td>
<td>A bicycle safety clinic featuring bike safety inspections and a safety lecture, followed by a ride on a miniature “chalk street” course where young cyclists are shown where and how to apply the rules.</td>
<td>Work with Imperial County Sheriff’s Department, IUSD, each school, and IUSD School Police to sponsor at least annual bicycle rodeos for each school.</td>
</tr>
<tr>
<td>Pedestrian and bicycle safety skills course for adults</td>
<td>Adults often do not know current regulations or protocols for safe walking or bicycling. These skills are important for parents to pass on to their children.</td>
<td>Work with organizations such as the League of American Bicyclists, Imperial County Sheriff’s Department, and IUSD School Police to offer regularly scheduled multilingual skills courses in walking and bicycling for adults at local parks and the civic center.</td>
</tr>
<tr>
<td>Pedestrian and bicycle safety skills course for youth</td>
<td>These courses provide hands-on learning for young children on how to walk safely and ride a bicycle. Pedestrian skills training should be targeted to first and third graders, and bicycle skills training for third and fifth graders.</td>
<td>Work with organizations such as the League of American Bicyclists, Imperial County Sheriff’s Department, and IUSD School Police to offer regularly scheduled, multilingual skills courses in walking and bicycling for adults at local parks and/or each school. Work with IUSD to institutionalize bicycle and pedestrian skills course training at each school.</td>
</tr>
<tr>
<td>Program</td>
<td>Description</td>
<td>Implementation Steps</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Personal safety training</td>
<td>Training on personal safety prepares students to address any issues on their way to school, where they feel unsafe due to crime, harassment or violence.</td>
<td>Work with the Imperial County Sheriff’s Department and IUSD School Police to understand what materials exist around personal safety to train and distribute to students and parents.</td>
</tr>
<tr>
<td>Print and media campaign with safe walking, bicycling, and driving messages</td>
<td>Promote educational messages such as “STOP! It could be someone you love in the crosswalk” or “Use the other pedal and slow down” into media coverage, events, street banners, maps, posters, stickers, guides, etc. Consider distributing “neighborhood slow zone” signage for residents to place in their yards, and flyers to schools. Messaging should be multilingual.</td>
<td>The County can develop or adapt nationally recognized media campaign materials, including flyers, stickers, and talking points, and distribute to the schools. Communication channels include messages from the principal through tele-parent (automatic calls), parent meetings, the family center, flyers, coffee with the principal, back to school night, parent-teacher meetings, school marquis, a monthly newsletter, and social media.</td>
</tr>
<tr>
<td>Safe driving tips</td>
<td>Information about safe driving in Cudahy and around schools.</td>
<td>Create and/or adapt existing materials on safe driving to distribute to community members and parents who are dropping off or picking up their children at school.</td>
</tr>
<tr>
<td>Safe walking and bicycling tips</td>
<td>Information about safe walking and bicycling.</td>
<td>Create and/or adapt existing materials on safe walking and bicycling to distribute to community members and parents. Materials are available through the National Center for Safe Routes to School, FHWA, and others.</td>
</tr>
</tbody>
</table>
4.3. Encouragement

These programs generate excitement about walking and bicycling, and help spread the message that walking and bicycling is not only beneficial for health, social, and economic reasons, but enjoyable as well. Encouragement strategies are especially important when working with youth. Coordinating with individual schools to select prizes that are appropriate and customized will enhance encouragement programs. In addition to youth, parents should also be targeted in order to increase their involvement in SRTS.

Table 4.3. Encouragement Programs

<p>| Program                          | Description                                                                                                                                                                                                                                                                                                                                 | Implementation Steps                                                                                                                                                                                                                     |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| “Caught being good”             | Law enforcement officers distribute “tickets” to students that are “caught being good,” which means they were following safety rules. The “tickets” are typically coupons for discounts at local businesses or a certificate.                                                                                     | The County can approach law enforcement officials to see whether they are interested in spearheading such an encouragement program, as well as coordinate with local businesses to receive coupons that appeal to youth.                                             |
| International Walk-to-School Day| International Walk to School Day, held in October each year, joins children and adults from around the world to celebrate walking and bicycling to school.                                                                                                                                                                                                 | Generally, the County can help provide support to schools by providing incentive items, law enforcement support along pre-determined walking routes, and meeting locations throughout the county, as well as participating in the event. |
| Open streets events             | Local streets are closed to vehicle traffic for a short period of time, so residents and visitors can experience this public space in a new way. CicLAvia in Los Angeles helps residents get used to walking and bicycling in a safe environment without cars.                                                                                      | The County can work with organizations to organize an open streets event in the community and encourage attendance. Volunteers are needed to support the event.                            |
| Parent awards                   | Distribute awards to parents that support the SRTS program.                                                                                                                                                                                                                                                                                                                                              | Provide the schools with certificates to recognize parents who have been exemplary volunteers to support SRTS. Recognize key school and parent staff at City Council meetings.                                                     |
| Park and walk                   | A pre-determined parking lot acts as the meeting area for families who drive and then park and walk the remaining distance to school.                                                                                                                                                                                                                                                                     | Work with local businesses to create agreements that allow their parking lots to serve as park and walk meeting locations. Distribute this information to the schools and promote the opportunity throughout the community. |
| Principal, mayor, and/or teacher-led walks | Key community leaders, such as the mayor, council members, principals and teachers, can lead regular walks in the community outside of school hours to encourage walking.                                                                                                                                                                                                                                  | The County can organize staff to help lead walking events and/or a separate walk as part of existing events, such as the Imperial Valley Expo.                                                                                     |</p>
<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Implementation Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student or classroom competitions with prizes</td>
<td>Contests encourage children either to begin walking and bicycling to school or to increase their current amount of physical activity by making it fun and rewarding. Competitions can be between students (e.g., student with most miles walked), or between classrooms (e.g., classroom with the most students walking to school). Generally, children track their progress and get a small gift or a chance to win a prize after they reach a certain goal.</td>
<td>The implementation of student or classroom competitions is typically school-driven. There are many existing templates for tracking progress. These include templates for punch cards that are marked whenever a child walks and programs such as “Fire up your Feet” which track information online. The County can support a citywide competition and provide materials for competitions, such as pedometers, reflectors, stickers, and plaques.</td>
</tr>
<tr>
<td>Walk and roll Wednesdays</td>
<td>Designated day where students are encouraged to ride their bicycles or walk together to school and/or for short trips.</td>
<td>The County can promote a regular walking and bicycling day of the week or month for the community, and advertise it through available channels (at school, town hall, council meetings, etc.).</td>
</tr>
<tr>
<td>Walking school bus/ bicycle train</td>
<td>A walking school bus consists of groups of students accompanied by adults who walk a pre-planned route to school. Bicycle trains work like walking school buses. Adults, or older students, can lead the ride to school along a route that others can join on.</td>
<td>The implementation of walking school buses and bicycle trains is typically parent and school-driven. The County can support walking school buses and bicycle trains by volunteering to lead walks/rides, providing police support along pre-determined routes, and reviewing routes for any safety concerns.</td>
</tr>
</tbody>
</table>
4.4. Enforcement

Enforcement programs help deter unsafe behaviors of drivers, pedestrians, and bicyclists, and encourage all road users to obey traffic laws and share the road safely. The Imperial County Sheriff’s Department, local school police, and other law enforcement agencies will need to be involved in the execution of these programs.

Table 4.4. Enforcement Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Implementation Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corner captains</td>
<td>Adult volunteers stand at corners along routes to school so they can monitor students walking and deter any activity that may be harmful to students.</td>
<td>The County can alert neighbors along key routes to school to participate in the corner captain program by coming out to their front yard during the morning walk to school.</td>
</tr>
<tr>
<td>Crossing guards</td>
<td>Crossing guards promote safe behaviors at crosswalks by helping children safely cross the street at key locations and reminding drivers of the presence of pedestrians.</td>
<td>The County already has a crossing guard program, which could be expanded to cover additional intersections near each school.</td>
</tr>
<tr>
<td>Law enforcement presence</td>
<td>Provide an enforcement presence that discourages dangerous behaviors on and off the school campus. This may mean issuing warnings to drivers breaking traffic laws. Drivers who have made a minor error will often respond to a warning from an officer by being more careful. Drivers who continue to violate traffic laws need to be ticketed.</td>
<td>The County can work with the Sheriff’s Department and local school police to target enforcement based on areas of most concern.</td>
</tr>
<tr>
<td>Neighborhood watch</td>
<td>Neighborhoods work with police to observe motor vehicle speeds and report crimes.</td>
<td>The County can provide regular updates to the local Neighborhood Watch group about any activity, and on the Safe Routes to School program.</td>
</tr>
<tr>
<td>Pedestrian decoy program</td>
<td>This program is used in areas where drivers are not yielding to pedestrians in marked crosswalks. Plainclothes police officers cross the street, while another officer monitors driver behavior from a distance. The officer then will issue a warning or citation and educational materials depending on the situation.</td>
<td>The County can share this idea with the Imperial County Sheriff’s Department, and collect data from observational surveys to understand appropriate locations for law enforcement to monitor.</td>
</tr>
<tr>
<td>Program</td>
<td>Description</td>
<td>Implementation Steps</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Radar enforcement</td>
<td>Strict enforcement of speed laws in school zones can improve the safety for children walking and bicycling to school. A ‘zero tolerance’ policy for speeders in school zones, and an increase in fines for drivers who violate the posted school zone speed limit, are both potential approaches.</td>
<td>The County can work with the Sheriff’s Department and local school police to target enforcement based on areas of most concern.</td>
</tr>
<tr>
<td>Speed trailers, active speed monitors, and photo enforcement</td>
<td>Speed trailers and active speed monitors display the speed of oncoming vehicles. Both devices help officers track motorist speed, display current speed to motorists, and create awareness of the posted speed limit.</td>
<td>The County can work with the Sheriff’s Department to use and/or purchase equipment to monitor and enforce speed, and target areas of known speeding.</td>
</tr>
<tr>
<td>Student safety patrol (valet)</td>
<td>Student safety patrols enhance enforcement of drop-off and pick-up procedures at school by increasing safety for students and traffic flow efficiency for parents.</td>
<td>The school typically spearheads a student safety patrol or valet system. The County can assist by providing vests for participating students, as well as information material about setting up successful valet programs.</td>
</tr>
</tbody>
</table>
4.5. Future Evaluation

Evaluation of this program will consist of periodic surveys to determine how commute to school patterns have changed, as well as to assess what is working and what may need modifying. Annual student tallies like the baseline tallies conducted for this Plan will inform the County and schools if fewer students are arriving by car and more are walking or bicycling, and by how much.

Table 4.5. Evaluation Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Implementation Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycle and pedestrian counts</td>
<td>Counting numbers of bicyclists and pedestrians around the County can help staff prioritize improvements. These counts can also be included in travel demand models. The Southern California Association of Governments developed a count methodology that is now available for use by local jurisdictions.</td>
<td>The County should conduct a pedestrian and bicycle count at least every other year and preferably annually. The County can work with organizations to organize and administer a count. The counts typically require volunteers.</td>
</tr>
<tr>
<td>Parent attitudinal surveys</td>
<td>Survey questions, such as “what deters you from bicycling?” or “what mode do you use for short trips?” aim to understand attitudes toward walking, bicycling, and common concerns with letting students walk or bicycle to school.</td>
<td>The National Center for Safe Routes to School has a standard parent survey form that the County should distribute to schools annually for administration. The County should collect completed forms, analyze data, and submit results to the schools and the National Center.</td>
</tr>
<tr>
<td>Student tallies</td>
<td>This survey asks what mode a respondent used for a certain trip. Mode of travel surveys are commonly done in schools as part of SRTS to find out how many children walked, bicycled, were driven, etc.</td>
<td>The National Center for Safe Routes to School has a standard student tally form that the County should distribute to schools annually for administration. Or, the schools can use a simple “how did you get to school today” raise your hand tally. Ideally, this should be done every year.</td>
</tr>
</tbody>
</table>

4.6. Engineering (Conceptual)

Imperial County aspires to have streets that enhance quality of life available to all residents and provide safe and comfortable means of travel by foot, bicycle, transit, and vehicle. The pedestrian and bicycle engineering treatments included in this Plan will certainly help the County towards this goal. However, the recommendations included here are specific to the trip to and from school, with an eye toward students safely walking and bicycling to school. The County will continue to actively engage the community to ensure safety of all street users is a priority.

The recommendations included here are summarized in the following section “SRTS Plans by School”.
5. SRTS Plans by School

Comments from SRTS workshops were brought along when fieldwork was conducted so that the resulting plans address the issues raised. The fieldwork also identified new issues, which the plans address at each of the following schools:

**Brawley Elementary School District**
- Barbara Worth Junior High School
- J.W. Oakley Elementary School
- Miguel Hidalgo Elementary School
- Myron D. Witter Elementary School
- Phil D. Swing Elementary School

**Brawley Union High School District**
- Brawley Union High School
- Desert Valley High School

**Calexico Unified School District**
- Aurora High School
- Blanche Charles Elementary School
- Calexico High School
- Cesar Chavez Elementary
- De Anza 9th Grade Academy
- Dool Elementary
- Enrique Camarena Junior High School
- Jefferson Elementary
- Kennedy Gardens Elementary
- Mains Elementary
- Rockwood Elementary
- William Moreno J.H.S.

**Calipatria Unified School District**
- Bill Smith Jr. Middle School
- Calexico Community School
- Calipatria High School
- Fremont Primary School
- Grace Smith Elementary School

**Central Union High School District**
- Central High School
- Desert Oasis High School
- Southwest High School

**El Centro Elementary School District**
- Ballington Academy for the Arts and Sciences
- De Anza Magnet School
- Desert Garden Elementary School
- Harding Elementary School
- Hedrick Elementary School
- Imagine Imperial Valley
- John F. Kennedy Middle School
- Lincoln Elementary School
- Martin Luther King Jr. Elementary School
- McKinley Elementary School
- Sunflower Elementary School
- Woodrow Wilson Junior High School

**Heber Elementary School District**
- Dogwood Elementary School
- Heber Elementary School

**Holtville Unified School District**
- Emmett S. Finley Elementary School
- Holtville Middle School
- Holtville High School

**Imperial Unified School District**
- Ben Hulse Elementary School
- Frank Wright Middle School
- Imperial Avenue Holbrook High School
- Imperial High School
- T.L. Waggoner Elementary School

**San Pasqual Valley Unified School District**
- San Pasqual Elementary School
- San Pasqual Middle School
- San Pasqual Valley High School

**Seeley Union School District**
- Seeley Elementary School

**Westmorland Union Elementary School District**
- Westmorland Elementary School
The planned physical improvements along school routes are described in the following pages. The design section at the end of this Plan provides definitions and guidance on these improvements. All bulb-outs and curb extensions will include perpendicular curb ramps and truncated dome tactile devices for the sight-impaired. All pedestrian signals will include audible signals for the sight-impaired.

For each school, a planned list of improvements was created. The list gives the County and local jurisdictions projects that they can seek funds for. The County and local jurisdictions may want to change the list over time, as the list is conceptual. Engineering will need to be conducted prior to construction.

Maps on the following pages illustrate common routes that students take to get to school. The proposed improvements were planned along these routes. The crossing improvements are numbered and shown on the map with their corresponding numbers.

Shade from trees also serves as an important factor to encourage more walking and bicycling. It is encouraged to plant native, drought-tolerant shade trees along walking and bicycling routes, where appropriate. Shade trees are important given the county has half the days of the year over 90 degrees.
Barbara Worth Junior High School
Brawley Elementary School District

SRTS Workshop

A SRTS workshop was conducted on October 1, 2015 for the Brawley Elementary District schools. The following key stakeholders from Barbara Worth Junior High attended:

- School principal
- Parents
- Students
- School District Superintendent
- Representatives from the City of Brawley Public Works Department
- Representative from the City of Brawley Parks Department
- Representatives from the Brawley Police Department
- Representatives from the Imperial County Transportation Commission
- Representative from Caltrans District 11

Safety Issues Raised at the Stakeholder Workshop

General

- Lack of crosswalks
- Speeding
- No designated drop-off and pick-up zones
- Lack of street lights around schools
- Unfavorable weather/climate
- Cars do not stop to give way to pedestrians

Location Specific

- Imperial Ave. & D St.
  - need crossing guards and sign
- Main St. (SR-86) & 6th St.
  - need crossing guard
- Western Ave. & C St.
  - no marked crosswalk or signs
- 1st St. & C St.
  - no marked crosswalk and signs
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

LEGEND

Collision Type
- Bicycle-Involved Fatal Collision
- Bicycle-Involved Injury Collision
- Pedestrian-Involved Fatal Collision
- Pedestrian-Involved Injury Collision

Bicycle and Pedestrian Collisions 2008 - 2012
Barbara Worth Junior High School
Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

**Imperial Ave. & D St.**

Existing

- 2-way stop for D St.
- Yellow ladder crosswalks on all legs
- Assembly B signs on both approaches to the north and south leg crosswalks

Proposed

- Add advance stop lines to the east and west legs (2)
- Add advance yield lines to the north and south leg crosswalks (2)
- Add Assembly D signs to the north leg crosswalk (2)
- Add a R1-6 sign to the north leg crosswalk (1)
- Add Assembly B and D signs to the south leg crosswalk (2)
- Add R1-5 signs to the north and south leg crosswalks (2)
- Add curb extensions to the north, south, and east legs (6)
Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through the SRTS Committee.

Education

- Bicycle safety education; involve both students and parents
- Parent driver safety education
- Establish drop-off and pick-up zones
- Personal safety education
- Include high school students with junior high students in safety education programs

Encouragement

- Walking school buses
- International Walk-to-School Day
- Contests and prizes (certificates and gift cards)
- Include parents in the contests and prizes

Enforcement

- Law enforcement visibility
- Speed trailers
- Need more crossing guards
- Need more crosswalks and signs
J.W. Oakley Elementary School  
*Brawley Elementary School District*

**SRTS Workshop**

A SRTS workshop was conducted on October 1, 2015 for the Brawley Elementary District schools. The following key stakeholders from J.W. Oakley attended:

- School principal
- Parents
- Students
- School District Superintendent
- Representatives from the Brawley Police Department
- Representatives from the City of Brawley Public Works Department
- Representative from the City of Brawley Parks Department
- Representative from the Imperial County Transportation Commission
- Representative from Caltrans District 11

**Safety Issues Raised at the Stakeholder Workshop**

**General**

- Double parking
- Doors opening onto the road
- Parking and dropping off in the “no parking” zone
- Use of empty lots for drop-off and pick-up
- Speeding
- U-turns

**Location Specific**

- B St. & Eastern Ave.
  - Safety concerns between cars and crossing pedestrians
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

**LEGEND**

- Bicycle-Involved Fatal Collision
- Bicycle-Involved Injury Collision
- Pedestrian-Involved Fatal Collision
- Pedestrian-Involved Injury Collision

**Bicycle and Pedestrian Collisions 2008 - 2012**

J.W. Oakley Elementary School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

B St. & Eastern Ave.

Existing

• 4-way stop
• Yellow ladder crosswalks on all legs

Proposed

• Add raised yellow zebra-stripe crosswalks to the north and west legs (2)
• Add advance stop lines to all legs (4)
• Add curb extensions to all legs (8)

Bicycle Parking

• Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through the SRTS Committee.

**Education**

- Bicycle safety education; involve both students and parents
- Track students that walk or bike to school and reward students that do

**Encouragement**

- Bike Rodeos
- International Walk-to-School day (held on October 7, 2015)
- Bike helmet stickers

**Enforcement**

- Rader trailer
- Police give tickets to students for “caught being good”
Miguel Hidalgo Elementary School
Brawley Elementary School District

SRTS Workshop

A SRTS workshop was conducted on October 1, 2015 for the Brawley Elementary District schools. The following key stakeholders from Miguel Hidalgo Elementary School attended:

- School principal
- Parents
- Students
- School District Superintendent
- Representatives from the City of Brawley Public Works Department
- Representative from the City of Brawley Parks Department
- Representatives from the Brawley Police Department
- Representative from the Imperial County Transportation Commission
- Representative from Caltrans District 11

Safety Issues Raised at the Stakeholder Workshop

General

- While attendees were present, no responses were submitted for “General” safety issues

Location Specific

- Cesar Chavez St. & K St.
  - pedestrians not using the crosswalk, crossing mid-block
- Cesar Chavez St. & J St.
  - no stop sign
- Along J St. from Cesar Chavez St. to 11th St.
  - pedestrians crossing mid-block
- Along Malan St. from 9th St. to Palm Ave.
  - truck route
  - dangerous crossing for students crossing from the south to school
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

LEGEND
Collision Type
- Bicycle-Involved Fatal Collision
- Bicycle-Involved Injury Collision
- Pedestrian-Involved Fatal Collision
- Pedestrian-Involved Injury Collision

Bicycle and Pedestrian Collisions 2008 - 2012

Miguel Hidalgo Elementary School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvements

1. Cesar Chavez St. & K St.

Existing

- 4-way stop
- Yellow transverse-line crosswalks on all legs

Proposed

- Add yellow zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- All curb extensions to all legs (8)
2. Cesar Chavez St. & J St.

Existing

- Uncontrolled intersection
- Yellow transverse-line crosswalks on the east and west legs

Proposed

- Add zebra-stripe crosswalks to the east and west legs (2)
- Add a raised zebra-stripe crosswalk to the south leg (1)
- Add advance yield lines to the east, west and south leg crosswalks (3)
- Add R1-5 signs to the east, west and south leg crosswalks (3)
- Add Assembly B and D signs to the approaches to the east and west leg crosswalks (2)
- Add advance yield lines on both approaches to the south leg crosswalk (2)
- Add a R1-6 sign to the south leg crosswalk (2)
- Add R1-5 signs to the south leg crosswalk (2)
- Add Assembly D signs to both approaches to the south leg (2)
- Replace the left turn lane and add crossing islands to the south leg crosswalk (1 pair)
- Add curb extensions to the east, west, and south legs (6)
Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. While attendees were present, no responses were submitted.

*Walk to School Day was held on October 7, 2015*
Brawley Elementary
School District

Myron D. Witter Elementary School
Myron D. Witter Elementary School
Brawley Elementary School District

SRTS Workshop

A SRTS workshop was conducted on October 1, 2015 for the Brawley Elementary District schools. The following key stakeholders from Myron J. Witter Elementary School attended:

- School principal
- Parents
- Students
- School District Superintendent
- Representatives from the City of Brawley Public Works Department
- Representative from the City of Brawley Parks Department
- Representatives from the Brawley Police Department
- Representative from the Imperial County Transportation Commission
- Representative from Caltrans District 11

Safety Issues Raised at the Stakeholder Workshop

General

- Double parking
- Cars are parked in front of the school all day
- Speeding
- Disregard of crossing guards
- People crossing mid-block, not using crosswalks

Location Specific

- Missing sidewalks
  - along 2nd St. from K St. to J St.
  - along J St. from 2nd ST. to 3rd St.
  - along 3rd St. from J St. to K St.
  - along Malan St. from 2nd St. to Imperial Ave.
- Along K St. from 1st St. to 2nd St.
  - general traffic congestion and crossing concerns
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012

Myron J. Witter Elementary School

Source of Data: University of California Transportation Injury Mapping System

LEGEND
Collision Type
• Bicycle-Involved Fatal Collision
• Bicycle-Involved Injury Collision
• Pedestrian-Involved Fatal Collision
• Pedestrian-Involved Injury Collision

Sources: Esri, HERE, DeLorme, USGS, Intermap, increment, iGraph, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Linear Improvements

2\textsuperscript{nd} St. from K St. to J St.; J St. from 2\textsuperscript{nd} St. to 3\textsuperscript{rd} St.; 3\textsuperscript{rd} St. from J St. to K St.

- Add sidewalks
  - Along 2\textsuperscript{nd} St. from K St. to J St. (approximately 380’)
  - Along J St. from 2\textsuperscript{nd} St. to 3\textsuperscript{rd} St. (approximately 670’)
  - Along 3\textsuperscript{rd} St. from J St. to K St. (approximately 370’)

Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through the SRTS Committee.

Education

- Designate student loading zones
- Expand safety patrol

Encouragement

- Walking school buses
- Walk and bike contests

Enforcement

- Crossing guards
- Safety patrol
- Repair and maintenance of crosswalks and street lights
Phil D. Swing Elementary School  
_Brawley Elementary School District_

**SRTS Workshop**

A SRTS workshop was conducted on October 1, 2015 for the Brawley Elementary District schools. The following key stakeholders from Phil D. Swing Elementary School attended:

- School principal
- Parents
- Students
- School District Superintendent
- Representatives from the City of Brawley Public Works Department
- Representative from the City of Brawley Parks Department
- Representatives from the Brawley Police Department
- Representative from the Imperial County Transportation Commission
- Representative from Caltrans District 11

**Safety Issues Raised at the Stakeholder Workshop**

**General**

- Double parking
- Speeding
- Unsafe crossings mid-block
- Parking in “no parking” zone/illegal parking

**Location Specific**

- Western Ave. & A St.
  - major traffic safety concerns
- Western Ave. & River Dr.
  - major traffic safety concerns
- Along Western Ave. from A St. to River St.
  - major traffic safety concerns
- Along A St. from El Cerrito Dr. to Western Ave.
  - lack of street lighting
- Along Western Ave. from A St. to E St.
  - lack of street lighting
- Along River Dr. from El Cerrito Dr. to Hovley Rd.
  - major traffic safety concerns
- A St. & 1st St.
  - safety concerns between cars and crossing pedestrians
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

**LEGEND**

- Bicycle-Involved Fatal Collision
- Bicycle-Involved Injury Collision
- Pedestrian-Involved Fatal Collision
- Pedestrian-Involved Injury Collision

**Bicycle and Pedestrian Collisions 2008 - 2012**

Phil D. Swing Elementary School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvements

1. Western Ave. & A St.

Existing

- 4-way stop
- Yellow ladder crosswalks on all legs

Proposed

- Add raised yellow zebra-stripe crosswalks on the north and west legs (2)
- Add advance stop lines to all legs (4)
- Add curb extensions to all legs (8)
2. Western Ave. & River Dr.

Existing

- 2-way stop for River Dr.
- Yellow transverse-line crosswalks on the north and west legs
- Assembly B signs on the north leg crosswalk
- Assembly D signs on both approaches to the north leg crosswalk
- Speed feedback signs

Proposed

- Add a raised zebra-stripe crosswalk to the north leg crosswalk (1)
- Add advance yield lines to both approaches to the north leg crosswalk (2)
- Add R1-5 signs to both approaches to the north leg crosswalk (2)
- Add an advance stop line to the west leg crosswalk (1)
- Add curb extensions to the north and west legs (4)
Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through the SRTS Committee.

Education

- Bicycle safety education; involve both students and parents
- Pedestrian safety education; involve both students and parents
- Parent driver safety education
- Personal safety education
- Health and environmental education

Encouragement

- Walking Wednesdays
- Walking school buses
- International Walk-to-School Day
- Contests and donations
- Park-and-walk sites

Enforcement

- Parents to teach and reinforce safety skills
- Parent driver safety enforcement
- Crossing guards
- Enforcement of traffic laws
- Speed monitors
Brawley Union High School
Brawley Union High School District

SRTS Workshop

A SRTS workshop was conducted on October 7, 2015 for the Brawley Union High District schools. The following key stakeholders from Desert Valley High School attended:

- School principal
- Parents
- Students
- Representatives from the Brawley Police Department
- Representative from the Imperial County Transportation Commission
- Representative from Caltrans District 11

Safety Issues Raised at the Stakeholder Workshop

General

- Drivers do not yield to pedestrians
- Missing curb ramps at sidewalk corners

Location Specific

- 5th St. & A St.
  - need a crossing guard
- Imperial Ave. & A St.
  - need a crossing guard
- Imperial Ave. & B St.
  - need a crossing guard
- Imperial Ave. & D St.
  - need a crossing guard
- 5th St. & C St.
  - need a crossing guard
- 5th St. & D St.
  - no crosswalk
- 7th St. & C St.
  - safety issues with crossing
- 7th St. & A St.
  - safety issues with crossing
- 8th St. & B St.
  - safety issues with crossing
- Plaza St. & Main St. (SR-78) (west end)
  - no crosswalk marking
- Plaza St. & Main St. (SR-78) (east end)
  - no crosswalk marking
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012

Brawley Union High School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

5th St. & A St.

Existing

- T-intersection
- 1-way stop for 5th St.
- Yellow transverse-line crosswalks on the east, south, and west legs
- Speed feedback sign on the east leg

Proposed

- Add yellow zebra-stripe crosswalks on the east, west and north legs (3)
- Add an advance stop line to the north leg crosswalk (1)
- Add advance yield lines to the approaches to the east and west leg crosswalks (2)
- Add R1-6 signs to the east and west leg crosswalks (2)
- Add R1-5 signs to the approaches to the east and west leg crosswalks (2)
- Add Assembly D signs to the approaches to the east and west leg crosswalks (2)
- Add curb extensions to all legs (6)
Bicycle Parking

- Add racks for 30 bicycles as described in the Design Guidance section. Add racks for 30 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

- Create a website for parents
- Broadcast announcements on radio stations
- Brochures and flyers

Encouragement

- Parades
- More traffic signs that alert drivers
- Create a mobile app
- Create a bike map that lists the bikeway routes
- Pedestrian “decoy”

Enforcement

- Crossing guards
- More police enforcement for safety patrols
- Better training for safety officials
Desert Valley High School
Brawley Union High School District

SRTS Workshop

A SRTS workshop was conducted on October 7, 2015 for the Brawley Union High District schools. The following key stakeholders from Desert Valley High School attended:

- School principal
- Parents
- Students
- Representatives from the Brawley Police Department
- Representative from the Imperial County Transportation Commission
- Representative from Caltrans District 11

Safety Issues Raised at the Stakeholder Workshop

General

- No curbs/sidewalks
- No marked bike lanes
- No loading/unloading areas
- No traffic signs and speed signs
- Lack of crosswalks

Location Specific

- No sidewalks
  - west side of 2nd Street from Magnolia St. to A St.
  - south side of Magnolia St. from the existing sidewalk just east of 1st St. to 2nd St.
  - north side of Magnolia St. from the 1st St. to 3rd St.
  - west side of 3rd St from Magnolia St. to A St.
- Imperial Ave. & A St.
  - unattended crossing
- Imperial Ave. & B St.
  - unattended crossing
- 5th St. & A St.
  - unattended crossing
- 7th St. & A St.
  - unattended crossing
- 8th St. & A St.
  - no crosswalk
- 8th St. & C St.
  - no crosswalk
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012

Desert Valley High School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Linear Improvements

2nd Street from Magnolia St. to A St.; Magnolia St. just east of 1st St. to 2nd St.; Magnolia St. from the 1st St. to 3rd St.; 3rd St from Magnolia St. to A St.

• Add sidewalks
  o west side of 2nd Street from Magnolia St. to A St. (approximately 330’)
  o south side of Magnolia St. from the existing sidewalk just east of 1st St. to 2nd St. (approximately 420’)
  o north side of Magnolia St. from the 1st St. to 3rd St. (approximately 1340’)
  o west side of 3rd St from Magnolia St. to A St. (approximately 320’)

Bicycle Parking

• Add racks for 30 bicycles as described in the Design Guidance section. Add racks for 30 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

• Pedestrian safety education; involve both students and parents
• More signage to alert vehicles

Encouragement

• Free prizes for walking to school (snow cones, passes for Ricochet)

Enforcement

• Crossing guards
• Mailers to parents on enforcement policies
• Bicyclists riding in the wrong direction
Calexico Unified School District Overview
Aurora High School, Blanche Charles Elementary School, Calexico High School, Cesar Chavez
Elementary School, De Anza 9th Grade Academy, Dool Elementary School, Enrique Camarena Junior
High School, Jefferson Elementary School, Kennedy Gardens Elementary School, Mains Elementary
School, Rockwood Elementary School, William Moreno Junior High School

SRTS Workshop
A SRTS workshop was conducted on September 23, 2015 for all schools within the Calexico Unified
School District. While the workshop was very well attended, not all schools sent representatives. As a
result, the general safety issues and program plans are combined for all schools. Some attendees
were familiar enough with different schools from their own such that they provided input regarding the
location specific issues at each school.

The following key stakeholders from the Calexico
School District attended:
  • School principal
  • Parents
  • Students
  • Representative from the City of Calexico
  • Representative from the Imperial County
    Transportation Commission
  • Representative of the Southern California
    Association of Governments
  • Representative from Caltrans District 11

Safety Issues Raised at the Stakeholder Workshop

General
  • Double parking
  • Drivers not obeying traffic laws and signs
  • Speeding
  • Poor street lighting
  • Drivers running stop signs
  • Texting and driving
  • Drivers not obeying crossing guards
  • Hot climate
  • Insufficient crosswalks
  • People crossing mid-block in undesignated crossing areas
  • Lack of bike lanes
  • Traffic/congestion
  • Lack of sidewalks
  • Blind spots created from wide corner turns
  • Loading/drop-off/pick-up zones create congestion
  • Children/parents living far away from school
• Students crossing Imperial Highway

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

• Bicyclist and pedestrian safety education; involve both students and parents
  o Can be provided by Calexico Police Department
• Pedestrian safety education; involve both students, parents, teachers, and drivers
  o Train students on how to keep within range of an adult while crossing
  o Teach students the rules and signals for crossing
• Bicycle and pedestrian rodeos
• Distribute printed materials
• Promote greater awareness of crossing guards through police safety patrols
• Drop-off and pick-up safety education and procedures
• Greater awareness of health and environmental advantages

Encouragement

• Walking and biking events
• Annual walk events (currently held in October)
• Weekly/monthly walk events
• Walking school buses and bicycle trains
• International Walk-to-School Day
• Contests with prizes
• Greater awareness of obesity problems
• Drivers to drive slower speeds during school hours
• Mailers to parents about school safety

Enforcement

• School speed limit signs
• More traffic sign and stop signs
• Lane enforcement
• Pedestrian “decoys”
• Photo enforcement
• Programs on how to share the road with bicyclists
• Police enforcement
• Speed trailers and speed feedback signs
• Ensure marked crosswalks
• Inform parents of safer designated routes students can take
• Monitor school drop-off and pick-up times
• Follow crossing guards
• Safety patrols
• Regulate pedestrian, bicyclist, and driver behaviors
• Traffic complaint hotline
Aurora High School  
Calexico Unified School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Rockwood Ave. & 7th St.
  o too congested
- Encinas Ave. & 7th St.
  o drivers do not obey traffic signs
- Paulin Ave. & 6th St.
  o safety issues with crossing
- Belcher St. & Encinas Ave.
  o no crossing guard
- Linda St. & Encinas Ave.
  o safety issues with crossing
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012

Aurora High School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

**Rockwood Ave. & 7th St.**

Existing

- 4-way stop
- No marked crosswalks

Proposed

- Add yellow zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add curb extensions to all legs (8)

Bicycle Parking

- Add racks for 30 bicycles as described in the Design Guidance section. Add racks for 30 skateboards/scooters. Add more if needed.
Blanche Charles Elementary School
Calexico Unified School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Lack of bike lanes along streets surrounding Blanche Charles Elementary School
  - Kloke Rd. from Sam Ellis St. to Birch St.
  - Kloke Rd. from Birch St. to Grant St.
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012

Blanche Charles Elementary School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Linear Improvements

1a. Kloke Rd. from Sam Ellis St. to Birch St.

Existing

- 80’ curb-to-curb, 4 lanes, center-turn lane
- On-street parking on both sides

Proposed Option 1

- Reduce the number of lanes from 4 to 2
- Widen the center-turn lane to 20’ and add dispersed landscaped median islands
- Add buffered bike lanes on both sides (0.4 miles)

Proposed Option 2

- Add buffered bike lanes on both sides (0.4 miles)

1b. Kloke Rd. from Birch St. to Grant St.

Existing

- 72’ curb-to-curb, 4 lanes
- On-street parking on both sides

Proposed Option 1

- Reduce number of lanes from 4 to 2
- Add a landscaped median (0.3 miles)
- Add buffered bike lanes on both sides (0.3 miles)

Proposed Option 2

- Add buffered bike lanes on both sides (0.3 miles)

Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Safety Issues Raised at the Stakeholder Workshop

Location Specific

• Birch St. (SR-98) from Imperial Ave. (SR-111) to Rivera Ave.
  o very dangerous
  o students cross in undesignated areas
• Birch St. (SR-98) & Rockwood Ave.
  o need more police
  o need signals and intersection improvements
• Birch St. (SR-98) & Perry Ave.
  o need more police to monitor crossings
  o cars drive to fast
• General area directly south of Calexico High School
  o students walking and crossing in undesignated areas
  o need better enforcement from crossing guards
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

![Bicycle and Pedestrian Collisions 2008 - 2012](image)

**Bicycle and Pedestrian Collisions 2008 - 2012**

*Source of Data: University of California Transportation Injury Mapping System*
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Linear Improvements

1a. Birch St. (SR-98) from Rockwood Ave. to Andrade Ave.

Existing

- 78’ curb-to-curb, 4 lanes, center turn lane

Proposed

- Add colored buffered bike lanes on both sides
- Add dispersed landscaped median islands

1b. Birch St. (SR-98) from Andrade Ave. to Rivera Ave.

Existing

- 98’ curb-to-curb, 4 lanes, center turn lane

Proposed

- Add colored buffered bike lanes on both sides
- Add dispersed landscaped median islands

Bicycle Parking

- Add racks for 30 bicycles as described in the Design Guidance section. Add racks for 30 skateboards/scooters. Add more if needed.
Cesar Chavez Elementary School
Calexico Unified School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Medina St. & Zapata St.
  - no crosswalk
  - no designated loading zone
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012

Cesar Chavez Elementary School
Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

Medina St. & Zapata St.

Existing

- T-intersection
- Yellow transverse-line crosswalks on the east and south legs
- 1-way stop for Medina St.
- Assembly C signs on both approaches to east leg crosswalk
- Crossing guard
- ‘School Xing’ Sign

Proposed

- Add a yellow zebra-stripe crosswalk to the south leg (1)
- Add a raised yellow zebra-stripe crosswalk to the east leg (1)
- Add an advance stop line to the south leg (1)
- Add advance yield lines to both approaches to the east leg crosswalk (2)
- Replace existing ‘School Xing Stop When Occupied’ sign with a R1-6 sign (1)
- Add R1-5 signs to both approaches to the east leg crosswalk (2)
- Replace ‘School Xing’ sign with Assembly D signs to both approaches to the east leg crosswalk (2)
- Add curb extensions to the east and south legs (4)
- Add ‘Slow School Xing’ pavement markings to both approaches to the east leg (2)
Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
De Anza 9th Grade Academy
Calexico Unified School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Birch St. (SR-98) & Blair Ave.
  - heavy traffic
- Blair Ave. & Rosemont St.
  - blind spots for drivers at the intersection
- Along Blair Ave. from Rosemont St. to Sherman St.
  - double parking
  - heavy traffic
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012
De Anza 9th Grade Academy
Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

Birch St. (SR-98) & Blair Ave.

Existing

• T-intersection
• One-way stop for Blair Ave.

Proposed

• Add zebra-stripe crosswalks to the west and south legs (2)
• Add an advanced stop line to the south leg crosswalk (1)
• Add advanced yield lines to both approaches to the west leg crosswalk (1)
• Add R1-5 signs to both approaches to the west leg crosswalk (2)
• Add Assembly B and D signs to both approaches to the west leg crosswalk (2)
• Add rapid-flash beacons to the west leg (1 set)
• Add crossing islands to the west leg crosswalk (1 pair)
• Add curb extensions to the south leg (2)

Bicycle Parking

• Add racks for 30 bicycles as described in the Design Guidance section. Add racks for 30 skateboards/scooters. Add more if needed
Dool Elementary School  
Calexico Unified School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Nearby park (bounded by Heber Ave. to the west, Mary Ave. to the east, 7th St. to the north, and 5th St. to the south) attracts intoxicated people and unwanted activity
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012

Dool Elementary School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

Encinas Ave. & 7th St.

Existing

- 4-way stop
- Yellow transverse-line crosswalks on all legs

Proposed

- Add zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add curb extensions to all legs (8)

Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Enrique Camarena Junior High School
Calexico Unified School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Rivera Ave. from Birch St. (SR-98) to Paseo Camino Real
  - no sidewalks on the east side
- Paseo Camino Real & G Anaya Ave.
  - not a 4-way stop
- Birch St. (SR-98) & Lavigne Rd.
  - big highway with lots of traffic
  - commercial truck route
- Birch St. (SR-98), east of Rivera Ave.
  - no sidewalks
Maps

There were no recorded bicyclist or pedestrian involved crashes for a five-year period between 2008 and 2012 near this school. (University of California Transportation Injury Mapping System)

The map below shows the proposed engineering projects along common routes used by students to get to school.
**Existing Conditions and Engineering Recommendations**

**Linear Improvement**

*Riviera Ave. from Birch St. (SR-98) to Paseo Camino Real*

- Add sidewalks on the east side of Riviera Ave. from Birch St. to Paseo Camino Real (approximately 1580')

**Bicycle Parking**

- Add racks for 20 bicycles as described in the Design Guidance section. Add racks for 20 skateboards/scooters. Add more if needed.
Jefferson Elementary School
Calexico Unified School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Paseo de Alteza & 7th St.
  - no crossing guard
- 7th St. from Andrade Ave. to Paseo de Altez
  - needs police surveillance
  - needs sidewalk improvements
- 5th St. & Paseo de Altez
  - no crossing guard
- 5th St. from Andrade Ave. to Paseo de Altez
  - no crossing guard
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

**Bicycle and Pedestrian Collisions 2008 - 2012**

Jefferson Elementary School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

**Paseo de Alteza & 7th St.**

**Existing**

- 4-way stop
- No marked crosswalks

**Proposed**

- Add zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add curb extensions to all legs (8)

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**Bicycle Parking**

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Kennedy Gardens Elementary School
Calexico Unified School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Rockwood Ave. & Robert Kennedy St.
  - blind spots
  - speeding
- Martin Luther King Ave. & Daniel St.
  - double parking
  - U-turns
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012

Kennedy Gardens Elementary School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
**Existing Conditions and Engineering Recommendations**

**Crossing Improvement**

**Rockwood Ave. & Robert Kennedy St.**

**Existing**

- T-intersection
- 1-way stop for Robert Kennedy St.
- Yellow transverse-line crosswalks on the north and east legs
- Assembly B and D signs on both approaches to the north leg crosswalk

**Proposed**

- Add a zebra-stripe crosswalks to the east leg (1)
- Add a raised zebra-stripe crosswalk to the north leg (1)
- Add an advance stop line to the east leg crosswalk (1)
- Add advance yield lines to both approaches to the north leg crosswalk (2)
- Add R1-5 signs to both approaches to the north leg crosswalk (2)
- Replace Assembly B signs with a R1-6 signs to the north leg crosswalk (2)
- Add curb extensions to the north and east legs (4)
- Add ‘Slow School Xing’ pavement marking to the south approach of the north leg crossing (1)
Bicycle Parking

• Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Mains Elementary School
Calexico Unified School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Birch St. (SR-98) & V. V. Williams Ave.
  - no crosswalk
  - needs a stop sign
- Birch St. (SR-98) & Eady Ave.
  - safety issues with crossing
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

**LEGEND**

Collision Type
- Bicycle-Involved Fatal Collision
- Bicycle-Involved Injury Collision
- Pedestrian-Involved Fatal Collision
- Pedestrian-Involved Injury Collision

**Bicycle and Pedestrian Collisions 2008 - 2012**

Mains Elementary School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

Birch St. (SR-98) & V. V. Williams Ave.

Existing

- T-intersection
- 1-way stop for V.V. Williams Ave.

Proposed

- Add zebra-stripe crosswalks to the north and west legs (2)
- Add an advance stop line to the north leg crosswalk (1)
- Add advance yield lines to both approaches to the west leg crosswalk (2)
- Add R1-5 signs to both approaches to the west leg crosswalk (2)
- Add Assembly B and D signs to both crossing approaches to the west leg crosswalk (2)
- Add rapid-flash beacons to the west leg crosswalk (1 set)
- Add crossing islands to the west leg crosswalk (1 pair)
- Add curb extensions to the northwest corner (2)
- Add a sidewalk on the west side of V.V. Williams Ave. from Canal St. to Birch St. (SR-98) (approximately 70’)
- Add a sidewalk on the south side of Birch Ave. from the crosswalk to Lee Ave. (approximately 60’)

![Diagram of Birch St. (SR-98) & V. V. Williams Ave. crossing improvement.](image-url)
Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Rockwood Elementary School
Calexico Unified School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Birch St. (SR-98) & Imperial Ave. (SR-111)
  - safety issues with crossing
- No bike lanes along streets around Rockwood Elementary
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012
Rockwood Elementary School
Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

Birch St. (SR-98) & Imperial Ave. (SR-111)

Existing

- Signalized intersection
- Transverse-line crosswalks on all legs
- Left-turn phases on all legs

Proposed

- Add zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add countdown signals to all crossings (8)
- Narrow travel and turn lanes down to 11’
- Add tapered curb extensions on east and north legs (4)

Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
William Moreno Junior High School
Calexico Unified School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Kloke Rd. & Birch St. (SR-98)
  - too much traffic
- Kloke Rd. & Sunset St.
  - double parking
  - too much traffic during drop-off and pick-up times
  - no bike lanes
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012
William Moreno Junior High School
Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

**Kloke Rd. & Birch St. (SR-98)**

Existing

- Signalized intersection
- Yellow transverse-line crosswalks on all legs
- Left-turn phases on all legs

Proposed Option 1

- Add yellow zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add curb extensions to the south leg (2)
- Extend curbs to line up with travel lanes on the east, west, and east legs (3)
- Taper down the north leg from 90’ to 62’
- Add countdown signals

Proposed Option 2 with Road Diet:

- Add a median adjacent to left-turn lane

Bicycle Parking

- Add racks for 20 bicycles as described in the Design Guidance section. Add racks for 20 skateboards/scooters. Add more if needed.
Calipatria
Unified School District

Fremont Primary School

Bill Smith Jr. Middle School

Calipatria High School
Fremont Primary School, Bill Smith Jr. Middle School, Calipatria High School
Calipatria Unified School District

SRTS Workshop

A SRTS workshop was conducted on April 29, 2015. Since the Fremont Primary School, Bill Smith Jr. Middle School and Calipatria High School all share the same grounds the issues were discussed simultaneously. The following key stakeholders attended:

- Elementary school principal
- Parents
- Grandparents
- Calipatria Mayor Pro-Tem
- Two Calipatria Board of Trustees
- Members of the representative from the SRTS Committee
- Representatives of the Imperial County Food Bank

Safety Issues Raised at the Stakeholder Workshop

General

- Double parking
- Congestion
- Students crossing the street in the middle of the block
- Parents dropping children off on the other side of the street, and at random locations
- Parking in the drop-off driveway
- Bicycles on sidewalks
- Need a crossing guard in front of the school
- Dogs
- Lack of signage

Location Specific

- Many students cross the street at Main St. and International Blvd.
- There is no crosswalk where students cross International Blvd. at Alamo St.
- Sorenson Ave. (SR-111) is a major street that students cross at Main St.
- Parents making U-turns in front of the west end of the school grounds
- Conflicts occur at the school driveway on Main St. with parents’ cars and students crossing
- Students ride bicycles on the sidewalk along International Blvd. to get from Alamo St. to the entrance
- Conflicts occur at the bus drop off on International Blvd. with students walking and others coming off the bus
- There are some stray dogs in the block SE of the intersection of Main St. and International Blvd.
Maps

There were no recorded bicyclist or pedestrian involved crashes for a five-year period between 2008 and 2012 near these schools. (University of California Transportation Injury Mapping System)

The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvements

1. Main St. and International Blvd.

Existing

- 4-way stop
- Angled parking on Main St.
- Yellow transverse-line crosswalks on all legs
- International Blvd. is 51’ wide with on-street parking

Proposed

- Add yellow zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add large curb extensions to inset the angled parking on Main St. (4)
- Add curb extensions to the north and south legs (4)
- Add crossing islands to all legs (4 pairs)
2. International Blvd. and Alamo St.

Existing

- T-intersection
- 1-way stop for Alamo St.
- No marked crosswalk
- No sidewalks on International Blvd. south of Alamo St.
- No sidewalks on Alamo St.
- The school driveway on the west side is directly across from Alamo St.

Proposed

- Add yellow zebra-stripe crosswalks to the north and south legs, north and south of the school driveway (2)
- Add a yellow zebra stripe crosswalk to the east leg (1)
- Add a new sidewalk on the east side of International Blvd. from Alamo St. to the new south leg crosswalk (approximately 120’)
- Add curb extensions to north, south and east legs (6)
- Add crossing islands to north and south leg crosswalks (2 pairs)
- Add advance yield lines to north and south leg crosswalks (4)
- Add R1-6 signs to north and south leg crosswalks (2)
- Ad R1-5 signs to north and south leg crosswalks (4)
- Add Assembly D signs to north and south leg crosswalks (4)
3. Main St. (SR-115 east of SR-111) and Sorenson Ave. (SR-111)

Existing

- 4-way stop
- Sorenson Ave. becomes 4 lanes only in the center of Calipatria
- Textured crosswalks on all legs
- Islands on Sorenson Ave. are blocking the crosswalks

Proposed Option 1

- Bring both streets down to 2 lanes and add bike lanes (0.3 mi. on SR-111; 0.85 mi. on Main St.)
- Replace stop signs with a roundabout
- Add curb extensions to all legs to choke the intersection down (8)
- Coordinate with Caltrans for changes on SR-111 and SR-115

Proposed Option 2

- Bring both streets down to 2 lanes and add bike lanes (0.3 mi. on SR-111; 0.85 mi. on Main St.)
- Add curb extensions on all legs to choke the intersection down (8)
- Add zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Coordinate with Caltrans for changes on Sorenson Ave.
Bicycle Parking

- Add racks for 40 bicycles as described in the Design Guidance section. Add racks for 20 skateboards/scooters. Place these racks at each the three schools. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through the SRTS Committee.

Education

- Bicycle safety education; involve both students and parents
- Pedestrian safety education; involve both students and parents
- Parent driver safety education
- Personal safety education with a focus on prevention of bullying
- Bike rodeos

Encouragement

- Walking Wednesdays
- International Walk-to-School Day
- Police give tickets to students for "caught being good"
- Walking school buses
- Contests with prizes

Enforcement

- Police presence during drop-off and pick-up
- Police enforce traffic laws
Calipatria
Unified School District

Grace Smith Elementary School
**Grace Smith Elementary School**  
*Calipatria Unified School District*

**SRTS Workshop**

A SRTS workshop for the Calipatria Unified School District was conducted on April 29, 2015. No stakeholders directly from Grace Smith Elementary School in Niland attended. However, the Board of Trustee members that attended and others we able to talk about the issues facing students at this school. The program portion of this Plan will be the same for Grace Smith Elementary as for schools in Calipatria. The following key stakeholders attended:

- Elementary school principal
- Parents
- Grandparents
- Calipatria Mayor Pro-Tem
- Two Calipatria Board of Trustees
- A representative from the school SRTS Committee
- Representatives of the Imperial County Food Bank

**Safety Issues Raised at the Stakeholder Workshop**

**General**

- Crossing a major street
- Speeding
- Dogs

**Location Specific**

- The crossing of SR-111 at 4th St. in front of the school is difficult because the cars are going fast
- There are no sidewalks along Isis Ave.
- The intersection of Isis Ave. and 3rd St. has congestion and is difficult
- The intersection of Isis Ave. and 4th St. has congestion and is difficult
- There are stray dogs along 1st St. between SR-111 and Isis Ave.
- There are abandoned buildings and personal safety issues along 1st St. between SR-111 and Isis Ave. and along SR-111 between 1st St. and 2nd St.
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.
The map below shows the proposed engineering project along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

SR-111 and 4th St.

Existing

- Uncontrolled yellow transverse-line crosswalk on south leg crossing SR-111

Proposed

- Add rumble bars on both approaches to the crosswalk (3 sets on each side)
- Add a yellow zebra-stripe crosswalk to the south leg (1)
- Add advance yield lines to both approaches to the south leg crosswalk (2)
- Add R1-5 signs to both approaches to the south leg crosswalk (2)
- Add Assembly B and D signs to both approaches to the south leg crosswalk (2)
- Add a sidewalk on the south side of 4th St. from SR-111 to the existing sidewalk (approximately 45')

Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

- Bicycle safety education; involve both students and parents
- Pedestrian safety education; involve both students and parents
- Parent driver safety education
- Personal safety education with a focus on prevention of bullying
- Bike rodeos

Encouragement

- Walking Wednesdays
- International Walk-to-School Day
- Police give tickets to students for “caught being good”
- Walking school buses
- Contests with prizes

Enforcement

- Police presence during drop-off and pick-up
- Police enforce traffic laws
Central Union High
School District
Central High School
Central Union High School District

SRTS Workshop

A SRTS workshop was conducted on May 28, 2015 for the Central Union High School District schools. The following key stakeholders from Central High School attended:

- School principal
- Parents
- Students
- Representative from the Imperial County Transportation Commission

Safety Issues Raised at the Stakeholder Workshop

General

- Speeding
- Unsafe driving by motorists

Location Specific

- Imperial Ave. & Brighton Ave.
  - no designated crosswalk over Imperial Ave.
- Imperial Ave. & Holt Ave.
  - difficult crossing of Imperial Ave.
- Holt Ave. & Wilson St.
  - safety issues with crossing
- Parking lot on Holt Ave.
  - students walking in area where cars entering/exiting conflict
- Orange Ave. & 8th St.
  - students not crossing properly
- Brighton Ave. & 8th St.
  - safety issues with crossing
- Orange Ave. & 7th St.
  - safety issues with crossing
- Orange Ave. & 4th St.
  - personal safety issue
- 4th St. between Hamilton Ave. & Ross Ave.
  - speeding
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

Imperial Ave. & Brighton Ave.

Existing

- 2-way stop for Brighton Ave.
- Uncontrolled crossing over Imperial Ave.

Proposed

- Add traffic signals to all legs (4)
- Add yellow zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add curb extensions to all legs (8)
- Add countdown signals to all legs (8)
Linear Improvement

Imperial Ave. from State St. to Holt Ave.

Existing

- 76’ curb-to-curb, 4 lanes, center turn lane,
- On-street parking on west side;

Proposed

- Colored bike lanes

Bicycle Parking

- Add racks for 30 bicycles as described in the Design Guidance section. Add racks for 30 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

- Personal safety training for students
- Safe driving near the school
- Assembly with safety training
- Assembly with safe driving training

Encouragement

- Promote off-site drop-off and pick-up locations

Enforcement

- Enforce unsafe driving
Central Union High

School District

Desert Oasis High School
SRTS Workshop

A SRTS workshop was conducted on May 28, 2015 for the Central Union High School District schools. The following key stakeholders from Desert Oasis High School attended:

- School principal
- Parent
- Representative of the Imperial County Transportation Commission

Safety Issues Raised at the Stakeholder Workshop

General

- Speeding
- Motorists turning to quickly at intersections
- Limited safe crossings

Location Specific

- Ross Ave. & 3rd St.
  - no designated crossing over Ross Ave.
  - speeding
- 4th St. (SR-86) between Ross Ave. & Orange Ave.
  - no designated crosswalks
- Ross Ave. between Hope St. & 3rd St.
  - missing sidewalks on both sides between Hope St. & 2nd St.
  - missing sidewalk on the north side between 2nd St. & 3rd St.
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing & Linear Improvements

Ross Ave. & 3rd St.

Existing

- T-intersection
- 1-way stop for 3rd St.

Proposed

- Add yellow zebra-strip crosswalks to the south and west legs (2)
- Use the protected buffer of the protected bike lanes to provide a pedestrian refuge on both Ross Ave. and 3rd St. and to narrow the crossings
- Extend the sidewalk on the north side of Ross Ave. to the west leg crosswalk (approximately 40’)
- Use the medians as crossing islands on the south and west legs (2 pairs)
- Add an advance stop line to the south leg crosswalk (1)
- Add advance yield lines to both approaches to the west leg crosswalk (2)
- Add R1-5 signs to both approaches to the west leg (2)
- Add Assembly B and D signs to both approaches to the west leg crosswalk (4)
- Add rectangular rapid-flash beacons to the west leg (1 set)
- Add curb extensions in the parking lanes on the west and south legs (4)
Ross Ave. from 4th St. to Aurora Dr.

Note: Ross Ave. is currently designated as a 4-lane arterial. The City will need to reconsider reducing Ross Ave. to a 2-lane street in order for this recommended configuration to work. In the future, this design may not be compatible with City plans.

- Protected bike lanes on Ross Ave. from 4th St. to 3rd St. (64’ – show configuration (0.2 mi.)

- Protected bike lanes on 3rd St. from Ross Ave. to Aurora Dr. (64’ – show configuration (0.2 mi.)
Bicycle Parking

- Add racks for 30 bicycles as described in the Design Guidance section. Add racks for 30 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Enforcement

- Speed feedback signs on Ross Ave. and on 3rd St.
Southwest High School  
Central Union High School District

SRTS Workshop

A SRTS workshop was conducted on May 28, 2015 for the Central Union High School District schools. The following key stakeholders from Southwest High School attended:

- School principal
- Crossing guard

Safety Issues Raised at the Stakeholder Workshop

General

- Lack of designated pedestrian crossings
- Traffic
- Students crossing midblock
- Parents dropping off students in the wrong places
- No bike lanes
- Lack of sidewalks
- No speed monitors and signs

Location Specific

- La Brucherie Rd. & Wake Ave.
- Along Ocotillo Dr.
  - lack of designated pedestrian crossings
  - heavy traffic
- Along La Brucherie Rd.
  - heavy traffic
- Ocotillo Dr. between Lotus Ave. & 24th St.
  - students crossing the street midblock
- Ocotillo Dr. & 22nd St.
  - parents dropping off students at the corner
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

La Brucherie Rd. & Wake Ave.

Existing

- Uncontrolled crosswalk on the north leg crossing
- Unmarked crosswalk

Proposed

- Add a zebra-stripe crosswalk on the north leg (1)
- Add a curb extension on the west side of the north leg (1)
- Add advance yield lines on both approaches to the north leg (2)
- Add R1-5 signs to both approaches to the north leg (2)
- Add Assembly B and D signs to both approaches to the north leg (2)
- Add rapid-flash beacons (1 set)
- Add a small center island for the rectangular rapid-flash beacon (1)
Bicycle Parking

- Add racks for 30 bicycles as described in the Design Guidance section. Add racks for 30 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

- Social media presence on Facebook and Twitter; create contest for students that bike and walk to school on social media
- Parent flyers

Encouragement

- Contests and recognition
- Award food vouchers from healthy business establishments

Enforcement

- Well-lit crosswalks
- More street lighting
- Provide free bike lights
**El Centro School District Overview:**

Ballington Academy for the Arts and Sciences, De Anza Magnet School, Desert Garden Elementary School, Harding Elementary School, Hedrick Elementary School, Imagine Imperial Valley, John F. Kennedy Middle School, Lincoln Elementary School, Martin Luther King Jr. Elementary School, McKinley Elementary School, Sunflower Elementary School, Washington Elementary School, Woodrow Wilson Junior High School

**SRTS Workshop**

A SRTS workshop was conducted on September 24, 2015 for all schools within the El Centro School District. While the workshop was very well attended, not all schools sent representatives. As a result, the general safety issues and program plans are combined for all schools. Some attendees were familiar enough with different schools from their own such that they provided input regarding the location specific issues at each school.

The following key stakeholders from the El Centro School District attended:

- School principal
- Parents
- Students
- Representatives from the City of El Centro
- Representative from the El Centro Police Department
- Representative from the Imperial County Transportation Commission
- Representative from Imperial County
- Representative from the Southern California Association of Governments
- Representative from Caltrans District 11
  Representative of Congressman Juan Vargas
Safety Issues Raised at the Stakeholder Workshop

General

- Lack of sidewalks
- Crossing concerns
- Crossing in undesignated areas
- Need better monitoring of crosswalks
- Curbs need to be repainted
- Need speed feedback signs
- Need signs to restrict parking in “no parking”/red zone
- Speeding cars
- Unsafe railroad crossing/highway crossing
- No paved roads in some places
- Parking in handicapped zones
- Parking in the drop-off and pick-up zones
- Lack of crosswalks
- Need ADA ramps
- Need sidewalk repairs
- No signage
- Unsignalized crossings
- Cars double parking
- Lack of street lighting
Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through the SRTS Committee.

Education

• Bicycle safety education; involve both students and parents

Encouragement

• Contests with prizes and recognition
• Weekly walks with parents and students

Enforcement

• Traffic safety classes for students and parents
• Police enforcement
Ballington Academy for the Arts and Sciences
*El Centro School District*

**Safety Issues Raised at the Stakeholder Workshop**

**Location Specific**

- La Brucherie Rd. & Main St.
  - no sidewalks
  - speeding
- Brighton Ave. & Imperial Ave.
  - speeding
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

**Bicycle and Pedestrian Collisions 2008 - 2012**

Ballington Academy for the Arts and Sciences

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

La Brucherie Rd. & Main St.

Note: The City is currently has plans to redesign and modernize this intersection, and will incorporate these recommendations. The project will be completed in 2017.

Existing

- Signalized intersection
- Transverse-line crosswalks on all legs
- Countdown signals for La Brucherie Rd. (northbound and southbound traffic)
- Left turn phases on all legs
- Missing sidewalks on all legs (curb ramp exists on northeast and northwest corners)

Proposed

- Add zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add a sidewalk on the north side of Main St. to connect to existing sidewalks (approximately 40’ east, and approximately 290’ west to 21st St.)
- Add sidewalk on the south side of Main St. to connect to existing sidewalk (approximately 340’ east, and approximately 800’ west to Solano Ave.)
- Add countdown signals for Main St. (eastbound and westbound traffic)
Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
De Anza Magnet Elementary School
El Centro School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

• Pepper Dr. & Waterman Ave.
  o very congested
  o speeding
• Desert Gardens Dr. & Waterman Ave.
  o difficulty seeing cars coming northbound and southbound
• Aurora Dr. & Waterman Ave.
  o double parking
• Ocotillo Dr. & Waterman Ave.
  o speeding
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012
De Anza Magnet School
Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

Pepper Dr. & Waterman Dr.

Existing

- T-intersection
- 1-way stop for Pepper Dr.
- Yellow transverse-line crosswalks on the north and east legs
- Advance stop line for the east leg crosswalk

Proposed

- Add a yellow zebra-stripe crosswalk to the east leg (1)
- Add a raised yellow zebra-stripe crosswalk to the north leg (1)
- Add advance yield lines to both approaches to the north leg crosswalk (2)
- Add a R1-6 sign to the north leg crosswalk (1)
- Add R1-5 signs to both approaches to the north leg crosswalk (2)
- Add Assembly D signs to both approaches to the north leg crosswalks (2)
- Add curb extensions to the north and east legs (4)

Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Desert Garden Elementary School

El Centro School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Driftwood Dr. & 6th St.
  - congestion
- Aurora Dr. & 6th St.
  - no stop sign
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012
Desert Garden Elementary School
Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvements

Driftwood Dr. & 6th St.

Existing

- 4-way stop
- No marked crosswalks
- No curb ramps on northwest, northeast, and southwest corners

Proposed

- Add yellow zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add curb extensions to all legs (8)

Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Harding Elementary School
El Centro School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- 8th St. & Wensley Ave.
  - lack of crosswalks
  - mid-block crossings occur
  - speeding along 8th St.
- Wensley Ave from 8th St. to 7th St.
  - double parking in school drop-off/pick-up zone
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

**LEGEND**

Collision Type
- Bicycle-Involved Fatal Collision
- Bicycle-Involved Injury Collision
- Pedestrian-Involved Fatal Collision
- Pedestrian-Involved Injury Collision

**Bicycle and Pedestrian Collisions 2008 - 2012**

Harding Elementary School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

8th St. & Wensley Ave.

Existing

- 2-way stop for Wensley Ave.
- No marked crosswalks

Proposed

- Add zebra-stripe crosswalks on the north, east, and west legs (3)
- Add advance stop lines to the east and west leg crosswalks (2)
- Add advance yield lines to both approaches to the north leg crosswalk (2)
- Add R1-5 signs to both approaches to the north leg crosswalk (2)
- Add Assembly B and D signs to both approaches to the north leg crosswalk (2)
- Add crossing islands to the north leg crosswalk between the southbound left-turn lane and the #1 travel lane (1 pair)
  - On-street parking will be removed near the intersection to accommodate crossing islands
- Add rapid-flash beacons to the north leg crosswalk (1 set)
- Add curb extensions to the east and west legs (4)

Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Hedrick Elementary School
*El Centro School District*

**Safety Issues Raised at the Stakeholder Workshop**

**Location Specific**

- Orange Ave. & Waterman Ave.
  - busy intersection
- Waterman Ave. from Orange Ave. to Hamilton Ave.
  - lots of traffic with adjacent St. Mary’s School
- La Brucherie Rd. from Main St. to Orange Ave.
  - needs improvement
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

**Bicycle and Pedestrian Collisions 2008 - 2012**

Hedrick Elementary School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

Orange Ave. & Waterman Ave.

Existing

- 4-way stop
- Yellow transverse-line crosswalk on the west leg
- Yellow ladder crosswalk on the south leg
- Advance stop line on the south leg

Proposed

- Add yellow zebra-stripe crosswalks to the north, west, and east legs (3)
- Add a raised yellow zebra-stripe crosswalk to the south leg (1)
- Add advance stop lines to the north, west, and east leg crosswalks (3)
- Add curb extensions to all legs (8)

Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Imagine Schools Imperial Valley
El Centro School District:

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Scott Ave. & Frontage Rd.
  - no stop sign
- Scott Ave. & Imperial Ave. (SR-86)
  - dangerous crossing
  - high-volume street
- Villa Ave. & La Brucherie Rd.
  - no crossing
  - stop light only
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

**LEGEND**

**Collision Type**
- Bicycle-Involved Fatal Collision
- Bicycle-Involved Injury Collision
- Pedestrian-Involved Fatal Collision
- Pedestrian-Involved Injury Collision

Bicycle and Pedestrian Collisions 2008 - 2012

Imagine Schools Imperial Valley

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

1. Scott Ave. & Frontage Rd.

Existing

- 2-way stop for Frontage Rd.

Proposed

- Add a zebra-stripe crosswalk to the north leg (1)
- Add an advance stop line to the north leg crosswalk (1)
- Add curb extensions to the north leg (2)

2. Scott Ave. & Imperial Ave. (SR-86)

Existing

- Signalized intersection
- Transverse-line crosswalks on the west, north and east legs

Proposed

- Add zebra-stripe crosswalks to the east, north and west legs (3)
- Add advance stop lines to the east, north and west legs (3)
- Add a median nose to the north leg crosswalk (1)
- Square off the center median on the north leg so it does not impede into the north leg crosswalk (1)
- Expand the center median on the north leg to remove the excess roadway on the #1 northbound lane (1)
- Remove the painted island for the right-turn southbound lane on the north leg on and the right-turn northbound lane on the south leg, and extend curbs to square off the right turn lanes (2)
- Add curb extensions to the east leg (2)
- Extend curb to line up with the excess shoulder on the northeast corner (1)
- Add countdown signals to all crossings (8)
Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Safety Issues Raised at the Stakeholder Workshop

Location Specific

- 6th St. from Sandy Ave. to RR crossing
  - speeding
- 6th St. from Lincoln Ave. to Pico Rd.
  - no sidewalks
- Villa Ave. from 8th St. to 6th St.
  - no sidewalks
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

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**LEGEND**

**Collision Type**

- Bicycle-Involved Fatal Collision
- Bicycle-Involved Injury Collision
- Pedestrian-Involved Fatal Collision
- Pedestrian-Involved Injury Collision

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**Bicycle and Pedestrian Collisions 2008 - 2012**

John F. Kennedy Middle School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Linear Improvement

6th St. from Sandy Ave. to RR crossing

Existing

- 40' curb-to-curb, 2 lanes, parking both sides
- Assembly C signs
- Existing Class III bike route

Proposed

- Add 6’ colored bike lanes northbound
- Add greenback sharrows southbound
- Add dispersed curb extensions
- Add a parking stripe on the west side of 6th St.
- Add a raised yellow zebra-stripe crosswalk on the south side of school (1)
- Add advance yield lines to both approaches to the south school crossing (2)
- Add a R1-6 sign to the south school crossing (1)
- Add R1-5 signs to both approaches to the south school crossing (2)
- Add Assembly D signs to both approaches to the south school crossing (2)

Bicycle Parking

- Add racks for 20 bicycles as described in the Design Guidance section. Add racks for 20 skateboards/scooters. Add more if needed.
Lincoln Elementary School
El Centro School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- 12\textsuperscript{th} St. & Adams Ave. (SR-86)
  - difficult crossing
- 12\textsuperscript{th} St. from El Centro Ave. to Main St.
  - congestion
  - need improved signage
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012
Lincoln Elementary School
Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
**Existing Conditions and Engineering Recommendations**

**Crossing Improvements**

*12th St. & Adams Ave. (SR-86)*

**Existing**

- 2-way stop for 12th St.
- Yellow transverse-line crosswalk on the west leg

**Proposed**

- Add traffic signals to all legs (4)
- Add zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add a median nose to the west and east leg crosswalks (2)
- Add curb extensions to all legs (8)
Linear Improvements

**Adams St./4th St. from just east of Euclid Ave. to Main St.**

**Existing**

- 33’ curb-to-median, 2 lanes
- On-street parking on both sides

**Proposed**

- Remove on-street parking
- Add buffered bike lanes on both sides (1.5 miles)
  - 7’ bike lanes
  - 2’ buffer

**Bicycle Parking**

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Martin Luther King Jr. Elementary School
El Centro School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Villa Ave. from La Brucherie Rd. to Imperial Ave. (SR-86)
  - speeding
  - no sidewalks
- La Brucherie Rd. from Villa Ave. to RR crossing
  - need pedestrian improvements
- 19th St. & Villa Ave.
  - need pedestrian improvements
- 17th St. & Villa Ave.
  - need pedestrian improvements
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

**LEGEND**

**Collision Type**
- Bicycle-Involved Fatal Collision
- Bicycle-Involved Injury Collision
- Pedestrian-Involved Fatal Collision
- Pedestrian-Involved Injury Collision

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**Bicycle and Pedestrian Collisions 2008 - 2012**

Martin Luther King Jr. Elementary School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Linear Improvement

Villa Ave. from N. La Brucherie Rd. to Imperial Ave. (SR-86)

- Add a sidewalk to the north side of Villa Ave. from the east side of school to Imperial Ave. (approximately 1770’)

Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
McKinley Elementary School
El Centro School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

• Imperial Ave. (SR-86) & Pico Rd.
  o safety issues with crossing
• Imperial Ave. (SR-86) & Villa Ave.
  o no crosswalk
• Oleander Ave. from 12th Rd. to 8th St.
  o open canal
• 8th St. from Pico Rd. to Adams Ave. (CA-86)
  o needs street improvement
  o speeding
  o RR track blocks visibility of street
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012
McKinley Elementary School
Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

Imperial Ave. (SR-86) & Pico Ave.

Existing

- Signalized intersection
- Transverse-line crosswalks on the east and south legs
- Left-turn phases on east and south legs

Proposed

- Add zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add median noses to the north and south legs (2)
- Add curb extensions to the west leg (2)
- Add curb extensions to the west corners of the north and south legs (2)
- Reduce the curb return on the east leg (2)
- Reduce the curb return on the west side of the main part of Imperial Ave. and extend the curbs on the Frontage Rd. separators to straighten the crossings over Frontage Rd. (1)
- Add full 8-phase signalization
Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Sunflower Elementary School
El Centro School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- 23rd St. & Main St.
  - people crossing in undesignated crossing area
- Lotus Ave. & Main St.
  - speeding
  - disobeying the crossing guard
Maps

There were no recorded bicyclist or pedestrian involved crashes for a five-year period between 2008 and 2012 near this school. (University of California Transportation Injury Mapping System)

The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

23rd St. & Main St.

Existing

- T-intersection
- 1-way stop for 23rd St.
- No marked crosswalks

Proposed

- Add zebra-stripe crosswalks on south and west legs (2)
- Add an advance stop line to the south leg crosswalk (1)
- Add advance yield lines to both approaches to the west leg crosswalk (2)
- Add R1-5 signs to both approaches to the west leg crosswalk (2)
- Add Assembly B and D signs to both approaches to the west leg crosswalk (2)
- Add crossing islands to the west leg crosswalk (1 pair)
- Add rapid-flash beacons to the west leg crosswalk (1 set)
- Add curb extensions to the south and west legs (4)
  - Extend the curb on the southwest corner far enough west to create a direct crosswalk on the west leg that avoids the School driveway on the north side
Bicycle Parking

• Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Washington Elementary School

El Centro School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- Brighton Ave. & 1st St.
  - no marked crosswalk
- Main St. & 1st St.
  - no marked crosswalk
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012

Washington Elementary School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
**Existing Conditions and Engineering Recommendations**

**Crossing Improvement**

**Brighton Ave. & 1st St.**

**Existing**
- 2-way stop for Brighton Ave.
- No marked crosswalks

**Proposed**
- Add zebra-stripe crosswalks to the east, west, and south legs (2)
- Add a raised zebra-stripe crosswalk to the north leg (1)
- Add advance stop lines on the east and west leg crosswalks (2)
- Add advance yield lines to the north and south leg crosswalks (2)
- Add R1-6 signs to the north and south leg crosswalks (2)
- Add R1-5 signs to the approaches to the north and south leg crosswalks (2)
- Add Assembly D signs to the approaches to the north and south leg crosswalks (2)
- Add curb extensions to all legs (8)

**Bicycle Parking**
- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.
Woodrow Wilson Junior High School
El Centro School District

Safety Issues Raised at the Stakeholder Workshop

Location Specific

- La Brucherie Rd. & Hamilton Ave.
  - no marked crosswalk
  - speeding
  - no crossing guard
  - no stop sign
- La Brucherie Rd. & Orange Ave.
  - speeding
- Imperial Ave. & Holt Ave.
  - speeding
  - no stop sign
- Hamilton Ave. & Imperial Ave.
  - speeding
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

Bicycle and Pedestrian Collisions 2008 - 2012

Woodrow Wilson Junior High School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

La Brucherie Rd. & Hamilton Ave.

Existing

- 2-way stop for Hamilton Ave.
- Transverse-line crosswalk on the south leg
- Assembly B and D signs on both approaches to the south leg crosswalk

Proposed

- Add traffic signals to all legs (4)
- Add zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add perpendicular curb ramps to the northeast corner (2)
- Add a sidewalk on the south side of Hamilton Ave. just east of La Brucherie Rd. (approximately 85')

Bicycle Parking

- Add racks for 20 bicycles as described in the Design Guidance section. Add racks for 20 skateboards/scooters. Add more if needed.
Heber Elementary
School District

Dogwood Elementary School
Dogwood Elementary School
Heber Elementary School District

SRTS Workshop

A SRTS workshop was conducted on September 30, 2015 for the Heber Elementary District schools. The following key stakeholders from Dogwood Elementary School attended:

- School principal
- Parents
- Students
- Representative from the Imperial County Transportation Commission
- Representative of the Southern California Association of Governments
- Representative of Caltrans District11
- County Supervisor

Safety Issues Raised at the Stakeholder Workshop

General

- No sidewalks – must walk and bike in traffic lanes
- No ADA access
- Lack of streetlights
- Speeding cars
- Unsafe intersections
- Need crossing guards
- No stop signs and crosswalks
- Need curbs and gutters

Location Specific

- west side of Dogwood Rd. from Black Hills Rd. to just north of Main St.
  - speeding
  - no sidewalks
  - need bike lanes
- east side of Dogwood Rd. from Correll Rd. to Main St.
  - no sidewalks
- Main St. & Dogwood Rd.
  - no streetlights
  - no sidewalks
• Heber Ave. from Correll Rd. to Main St.
  o need sidewalk on the west side
• Heber Ave. & Main St.
  o sidewalks are not ADA-compliant
• Correll Rd. from Heber Ave. to Bloomfield St.
  o speeding
  o no bike lanes
Maps

There were no recorded bicyclist or pedestrian involved crashes for a five-year period between 2008 and 2012 near this school. (University of California Transportation Injury Mapping System)

The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Linear Improvement

Dogwood Rd. from Black Hills Rd. to Main St.

Existing

• Missing sidewalks
  o west side of Dogwood Rd. just north of Main St.
  o east side of Dogwood Rd. from Correll Rd. to Main St.
• Assembly C signs
• Dogwood Rd. from Black Hills Rd. to Correll Rd.
  o 106' curb-to-curb, 4 lanes, center turn lane
  o 5' bike lanes
• Dogwood Rd. from Correll Rd. to just north of Main St.
  o 72' curb-to-curb, 4 lanes, center turn lane
  o 5' bike lanes

Proposed Option 1

• Add colored buffered bike lanes on both sides (0.75 mi.)
• Add protective islands to buffer the bike lanes along Dogwood Rd. (4 sets)
• Widen the center turn lane to 48' and add a 58' landscaped median from Black Hills Rd. to Correll Rd.
• Widen the center turn lane to 14' and add dispersed landscaped median islands from Correll Rd. to just north of Main St.
• Add speed feedback signs along Dogwood Rd. (4)
• Add a large curb extension on the northeast corner of Correll Rd. & Dogwood Rd. to line up with existing southeast corner (1)
• Add a sidewalk with a landscaped buffer on the east side from Correll Rd. to Main St. (approximately 2590')

Proposed Option 2

• Widen the center turn lane to 32' and add a 42' landscaped median from Black Hills Rd. to Correll Rd.
• Add sidewalks with a 8' landscaped buffer on both sides from Black Hills Rd. to Correll Rd. (approximately 1430')
Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through the SRTS Committee.

Education

- Bicycle safety education; involve both students and parents
- Pedestrian safety education; involve both students and parents
- Social media presence and publicity (school marquee, Teleparent, Facebook)
- Events

Encouragement

- Prize incentives and recognition
- Competitions
- Bike pedometers and distance counters
- Crossing guard training
- Walking Wednesdays
- Walking school buses
- International Walk-to-School Day

Enforcement

- Police presence during drop-off and pick-up
- Police enforce traffic laws
- Bicyclist safety
- Strategies to stagger drop-off and pick-up times
- Crossing guard monitoring
- Speed feedback signs
- More speed limit signs
- Speed bumps
Heber Elementary
School District
Heber Elementary School
Heber Elementary School District

SRTS Workshop

A SRTS workshop was conducted on September 30, 2015 for the Heber Elementary District schools. The following key stakeholders from Heber Elementary School attended:

- School principal
- Parents
- Students
- Representative from the Imperial County Transportation Commission
- Representative of the Southern California Association of Governments
- Representative of Caltrans District 11
- County Supervisor

Safety Issues Raised at the Stakeholder Workshop

General

- No sidewalks
- Mud/dirt pathways
- No ADA access
- Gang activity/bullying
- Lack of crosswalks and stop signs
- Need parent/culture change
- Speeding cars
- Need traffic enforcement to control speeding cars
- Need curbs and gutters

Location Specific

- Speeding issues
  - Heber Rd & Main St. (SR-86)
  - Main St. (SR-86) from Dogwood Rd. to Hefferman Rd.
  - Heber Ave. from 6th St. to Fawcett Rd.
  - Hawk St. & Dogwood Rd.
  - Parkyns Ave. from 6th St. to 11th St.
  - Hefferman Rd. from 6th St. to 11th St.
- Missing sidewalks
  - 14th St. from Heber Ave. to Hefferman Rd.
- Fawcett Rd. from Heber Ave. to Hefferman Rd.
- Main St. & Rockwood Rd.
  - missing sidewalks and railroad signs
Maps

There were no recorded bicyclist or pedestrian involved crashes for a five-year period between 2008 and 2012 near this school. (University of California Transportation Injury Mapping System)

The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvements

1. Heber Ave. & Main St. (SR-86)

Existing

- 2-way stop for Heber Ave.
- Yellow ladder crosswalk on the east leg
- Advance yield lines on both approaches to the east leg crosswalk
- Assembly B and D signs on both approaches to the east leg crosswalk
- Assembly C signs on the approach to the east leg crosswalk
- No curb ramps on the northeast, southeast, and southwest corners

Proposed

- Replace the yellow ladder crosswalk on the east leg with a white zebra-stripe crosswalk on the east leg (1)
- Replace advance yield lines on the east leg and move them in advance of the crosswalk (2)
- Add R1-5 signs to both approaches to the east leg crosswalk (2)
- Add rumble bars on both approaches to the east leg crosswalk (3 sets on each side)
- Add curb ramps to the northeast, southeast, and southwest corners (3)
- Add crossing islands to the east leg crosswalk (1 pair)
- Add rectangular rapid-flash beacons to the east leg crosswalk (1 set)
Linear Improvements

2. Main St. (SR-86) from Dogwood Rd. to Hefferman Rd.

Existing

- 44’ to 56’ curb-to-curb, 2 lanes
- Missing sidewalks
  - south side of Main St. from Dogwood Rd. to Heber St.
  - both sides of Main St. from Heber St. to Hefferman Rd.

Proposed

- Add buffered colored bike lanes on both sides (0.4 mi.)
- Add speed feedback signs along Main St. (4)
- Add a sidewalk with a landscaped buffer on the south side of Main St. from Dogwood Rd. to Heber St. (approximately 1320’)
- Add sidewalks with landscaped buffers on both sides of Main St. form Heber St. to Hefferman Rd. (approximately 750’ each side)

3. Heber Rd. from 6th St. to Fawcett Rd.

Existing

- Missing sidewalks
  - west side of Heber Rd. from 10th St. to Fawcett Rd.
  - east side of Heber Rd. from 14th St. to Fawcett Rd.
- Heber Rd. from 6th St. to Main St. (SR-86)
  - 72’ curb-to-curb, 2 lanes, parking both sides
- Heber Rd. from Main St. (SR-86) to 10th St.
  - 52’ curb-to-curb, 2 lanes, parking both sides
- Heber Rd. from 10th St. to Fawcett Rd.
  - 45’ curb to curb, 2 lanes, parking both sides

Proposed

- Add a sidewalk with a landscaped buffer on the west side of Heber Rd. from 10th St. to Fawcett Rd. (approximately 1880’)
- Add a sidewalk with a landscaped buffer on the east side of Heber Rd. from 14th St. to Fawcett Rd. (approximately 350’)
Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through the SRTS Committee.

Education

- Bicycle safety education; involve both students and parents
- Pedestrian safety education; involve both students and parents
- Parent driver safety education (especially during drop-off and pick-up areas)
- Personal safety education with a focus on prevention of bullying and drug use

Encouragement

- Contests with prizes and recognition
- Bike pedometers and distance counters
- Walking Wednesdays
- Walking school buses
- International Walk-to-School Day
- Morning bike inspections (helmet, safety tips, course set-up)
- Agency involvement from Sheriffs Department, CHP, and Caltrans

Enforcement

- Sheriff presence during drop-off and pick-up
- Sheriff enforce speeding and traffic laws
- Crossing guard monitoring
- Speed feedback signs and flash beacons at crosswalks
Emmett S. Finley Elementary School  
**Holtville Unified School District**

**SRTS Workshop**

A SRTS workshop was conducted on October 8, 2015 for all schools within the Holtville Unified School District. The following key stakeholders attended:

- School superintendent
- Parents
- Students
- Representative from the Imperial County Transportation Commission

**Safety Issues Raised at the Stakeholder Workshop**

**General**

- Drivers do not give way for pedestrians
- More parking might prevent double parking
- Lack of curb ramps
- Lack of signs
- Lack of street lighting
- Stray dogs in the neighborhood
- Narrow sidewalks
- Sidewalks are in bad condition

**Location Specific**

- 5th St. & Grape Ave.
  - no stop sign
- 6th St. & Figueroa Ave.
  - no curb ramps
- 6th St. & Maple Ave.
  - no curb ramps
- 5th St. & Chestnut Ave.
  - Drivers do not give way to pedestrians
- Along Chestnut Ave from 6th St. to 7th St.
  - students cross the street mid-block between cars
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

**Bicycle and Pedestrian Collisions 2008 - 2012**

Emmett S. Finley Elementary School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

5th St. & Grape Ave.

Existing

- 2-way stop for Grape Ave.
- Transverse-line crosswalk on the west leg
- Yellow transverse-line crosswalk on the south leg
- Assembly B sign for the south leg crosswalk

Proposed

- Add zebra-stripe crosswalks to the west and south legs (2)
- Add an advance stop line to the south leg crosswalk (1)
- Add advance yield lines to both approaches to the west leg crosswalk (2)
- Add R1-5 signs to both approaches to the west leg crosswalk (2)
- Add Assembly B and D signs to both approaches to the west leg crosswalk (4)
- Add crossing islands to the west leg crosswalk (1 pair)
- Add rectangular rapid-flash beacons to the west leg (1 set)
- Add curb extensions to the south leg (2)
- Add smaller curb extensions to fit the crossing islands on the west leg (2)
- Add rumble bars to the east approach of the west leg crosswalk (3 sets)
- Add a gateway over the east leg (1)
Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

- Teach students how to cross safely
- Obey traffic signs and signals

Encouragement

- Bicycle raffles
- Prizes (pool tickets, pizza parties)

Enforcement

- More signs
- Police enforcement and presence
Hotville Unified School District
School District

Hotville Middle School
Holtville Middle School
Holtville Unified School District

SRTS Workshop

A SRTS workshop was conducted on October 8, 2015 for all schools within the Holtville Unified School District. The following key stakeholders attended:

• School superintendent
• Parents
• Students
• Representative from the Imperial County Transportation Commission

Safety Issues Raised at the Stakeholder Workshop

General

• Double parking
• Students crossing without looking
• Traffic signs are not visible (i.e. move stop signs higher)
• Need better sidewalks
• Lack of bicycle lanes

Location Specific

• 8th St. & Beale Ave.
  o no stop sign
Maps

There were no recorded bicyclist or pedestrian involved crashes for a five-year period between 2008 and 2012 near this school. (University of California Transportation Injury Mapping System)

The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

8th St. & Beale Ave.

Existing

- T-intersection
- 1-way stop for 8th St.
- Yellow transverse-line crosswalks on the north and west leg

Proposed

- Add yellow zebra-stripe crosswalks to the north and west legs (2)
- Add an advance stop line to the west leg crosswalk (1)
- Add advance yield lines to both approaches to the north leg crosswalk (2)
- Add a R1-6 sign to the north leg crosswalk (1)
- Add R1-5 signs to both approaches to the north leg crosswalk (2)
- Add Assembly D signs to both approaches to the north leg crosswalk (2)
- Add crossing islands to the north leg crosswalk (1 pair)
- Add curb extensions to the north and west legs (4)
Bicycle Parking

- Add racks for 20 bicycles as described in the Design Guidance section. Add racks for 20 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

- Crosswalk painting
- Delineated bike lanes
- Pedestrian crossing safety education
- Educate drivers to obey traffic laws and signaling

Encouragement

- More walk and bike events
- Awards and recognition for students that walk and bike

Enforcement

- Speed monitors at street corners
- More speed signs
Holtville High School
Holtville Unified School District

SRTS Workshop

A SRTS workshop was conducted on October 8, 2015 for all schools within the Holtville Unified School District. The following key stakeholders attended:

- School superintendent
- Parents
- Students
- Representative from the Imperial County Transportation Commission

Safety Issues Raised at the Stakeholder Workshop

General

- Scary dogs
- Sidewalks in disrepair
- Speeding cars
- Streets are difficult to cross
- Unsafe streets for students to ride bicycles

Location Specific

- 8th St. & Olive Ave.
  - missing traffic light/pedestrian signs
- 7th St. & Olive Ave.
  - missing sidewalks and visible signs
  - missing police enforcement
- Olive Ave. from 7th St. to 8th St
  - general safety concern
- 8th St. & Holt Rd.
  - missing stop sign
  - missing traffic signs
  - missing crosswalk markings
- 7th St. & Holt Rd.
  - safety issues with crossing
- 6th St. & Holt Rd.
  - missing stop sign
  - missing traffic signs
  - missing crosswalk markings
  - missing pedestrian signs
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

**LEGEND**

**Collision Type**
- Red: Bicycle-Involved Fatal Collision
- Orange: Bicycle-Involved Injury Collision
- Triangle: Pedestrian-Involved Fatal Collision
- Diamond: Pedestrian-Involved Injury Collision

Sources: Esri, HERE, DeLorme, USGS, Intermap, iNCREMENT P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand). MapmyIndia. & OpenStreetMap contributors, and the GIS User Community.

**Bicycle and Pedestrian Collisions 2008 - 2012**

Holtville High School

Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvements

1. 8th St. & Olive Ave.

Existing

- 4-way stop
- Yellow transverse-line crosswalks on all legs

Proposed

- Add zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add curb extensions to all legs (8)
  - West curb extension on the south leg will extend further out to line up with the existing parking
2. 7th St. & Olive Ave.

Existing

- 4-way stop
- Yellow transverse-line crosswalks on all legs
- No curb ramps on any corner
  - no direct connection from the north and west crosswalks into school

Proposed

- Add zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Extend large curb extension on the north leg west to existing sidewalk (1)
- Extend large curb extension on the north leg north to line up with existing angled parking (1)
- Add curb extensions to the east, south, and west legs (6)
Bicycle Parking

- Add racks for 30 bicycles as described in the Design Guidance section. Add racks for 30 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

- Pedestrian signaling
- Traffic safety education, with a focus on obeying traffic signs
- Pedestrian safety education; involve both students and parents

Encouragement

- Biking and walking competitions/rewards

Enforcement

- Police enforcement during drop-off and pick-up times
- Ensure parents are obeying traffic signs and regulations
Imperial Unified
School District

Ben Hulse Elementary School
Ben Hulse Elementary School
Imperial Unified School District

SRTS Workshop

A SRTS workshop was conducted on May 26, 2015 for the Imperial Unified School District schools. The following key stakeholders from Ben Hulse Elementary School attended:

- School principal
- Superintendent
- School resource officer
- Former school board member
- Representative from the Imperial County Transportation Commission
- Representative from the Imperial County Department of Public Health

Safety Issues Raised at the Stakeholder Workshop

General

- Double parking
- Unsafe means of dropping off and picking up
- Adults not using the crosswalk
- Adults not following the rules

Location Specific

- 6th St. & D St.
  - very congested
  - difficult crossing
- Worthington Rd. from Nance Rd. to Dahlia Ln.
  - missing sidewalks on both sides
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

6th St. & D St.

Existing

- T-intersection
- 3-way stop
- Yellow transverse-line crosswalks on the north and south legs
- No curb ramps on the south side

Proposed

- Add yellow zebra-stripe crosswalks to the east and south legs (2)
- Add a raised zebra-stripe crosswalk to the north leg (1)
- Add advance stop lines to all legs (3)
- Add curb extensions to all legs (6)
- Connect this south leg crosswalk with paving through the parkway to the existing school sidewalk (approximately 6’ of new sidewalk)
Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

- Bicycle safety education
- Pedestrian crossing safety education
- Educate parents to drive safely around the school and to follow drop-off and pick-up procedures
- Educate students and parents on the health benefits of physical activity

Encouragement

- Events like Walk to School Day with music, etc.
- The Parent Teacher Organization could help to coordinate events

Enforcement

- Complaint hotline
- Photo enforcement
- Already have 5th grade safety patrol, but they need more training and more participants
Imperial Unified
School District

Frank Wright Middle School
Frank Wright Middle School
Imperial Unified School District

SRTS Workshop

A SRTS workshop was conducted on May 26, 2015 for the Imperial Unified School District schools. The following key stakeholders from Frank Wright Middle School attended:

- Teacher
- Parents
- Superintendent
- School resource officer
- Former school board member
- Representative from the Imperial County Transportation Commission
- Representative from the Imperial County Department of Public Health

Safety Issues Raised at the Stakeholder Workshop

General

- Dogs
- Students need safety vests
- Lack of sidewalks
- Motorists not coming to a complete stop
- Students texting while walking
- Students listening to music with earphones – can’t hear cars

Location Specific

- 15th St. & Imperial Ave.
  - difficult crossing
  - speeding
  - congestion
- 15th St. in front of the school
  - congestion
  - missing sidewalks
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.

**Frank Wright Middle**

Bicycle and Pedestrian Collisions 2008 - 2012
Frank Wright Middle School
Source of Data: University of California Transportation Injury Mapping System
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

15th St. & Imperial Ave.

Existing

- 4-way stop
- Transverse-line crosswalks on the east and west legs

Proposed

- Add zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to all legs (4)
- Add curb extensions to all legs (8)
- Add flashing LED lights to all stop signs (4)
Linear Improvements

15th St. from Imperial Ave. to F St.; Imperial Ave. from Belford Rd. to 13th St.

- Add buffered bike lanes to 15th St. (52’ wide) from Imperial Ave. to F St. (0.2 mi.)
- Add 7’ wide bike lanes to Imperial Ave. (48’ wide) from Belford Rd. to 13th St. (0.4 mi.)

Bicycle Parking

- Add racks for 20 bicycles as described in the Design Guidance section. Add racks for 20 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

- Warm up exercises

Encouragement

- Competitions
- Walking school buses from Eager Park
- Work with incoming 8th graders

Enforcement

- Police officer presence
Imperial Unified
School District
Imperial Avenue Holbrook High School
Imperial Unified School District

SRTS Workshop

A SRTS workshop was conducted on May 26, 2015 for the Imperial Unified School District schools. The following key stakeholders from Imperial Avenue Holbrook School attended:

- Superintendent
- School resource officer
- Former school board member
- Representative from the Imperial County Transportation Commission
- Representative from the Imperial County Department of Public Health

Safety Issues Raised at the Stakeholder Workshop

General

- Speeding

Location Specific

- 11th St. & Imperial Ave.
  - needs better markings, crosswalk, signs, etc.
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

11th St. & Imperial Ave.

Existing

- 2-way stop for 11th St.
- Yellow transverse-line crosswalk on the west leg

Proposed

- Add yellow zebra-stripe crosswalks to all legs (4)
- Add advance stop lines to the east and west legs (2)
- Add advance yield lines to both approaches to the north and south legs (2)
- Add R1-5 signs to both approaches to the north and south legs (2)
- Add Assembly B and D signs to both approaches to the north and south legs (4)
- Add curb extensions to all legs (8)
Linear Treatment

**Imperial Ave. from 13th St. to Barioni Blvd.**

- Add a buffered bike lane on Imperial Ave. from 13th St. to Barioni Blvd. (0.35 mi.)

Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

**Education**

- Bike rodeo on a Saturday or coordinate with Imperial High School

**Encouragement**

- Walking school buses
- Bike racks
- Golden sneaker award for walkers

**Enforcement**

- Signs
Imperial Unified
School District

Imperial High School
Imperial High School
Imperial Unified School District

SRTS Workshop

A SRTS workshop was conducted on May 26, 2015 for the Imperial Unified School District schools. The following key stakeholders from Imperial High School attended:

- Parents
- Superintendent
- School resource officer
- Former school board member
- Representative from the Imperial County Transportation Commission
- Representative from the Imperial County Department of Public Health

Safety Issues Raised at the Stakeholder Workshop

General

- Speeding
- Parents parking in the disabled parking
- Double parking
- Students not looking both ways
- Loose dogs
- Not enough bike lanes

Location Specific

- Mid-block on Barioni Blvd. between D St. and E St.
  - many students crossing without a marked and improved crosswalk
  - lots of traffic
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvement

Mid-block on Barioni Blvd. between D St. & E St.

Existing

• No marked crosswalk

Proposed

• Add a raised yellow zebra-stripe crosswalk mid-block just east of the existing curb cut in front of the school (1)
• Connect this new crosswalk with paving through the parkway to the existing school sidewalk (approximately 6’ of new sidewalk)
• Add advance yield lines to both approaches to the new crosswalk (2)
• Add a R1-6 sign to the new crosswalk (1)
• Add R1-5 signs to both approaches to the new crosswalk (2)
• Add Assembly D signs to both approaches to the new crosswalk (2)
• Add curb extensions to the new crosswalk (2)
Bicycle Parking

- Add racks for 30 bicycles as described in the Design Guidance section. Add racks for 30 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

- Promote education
- Educate motorists to follow the speed limit
- Distribute flyers
- Educate students to use crosswalks
- Educate students who drive to follow the laws and to follow speed limits

Encouragement

- Special parking privileges for student drivers who follow the laws
- Encourage students to take the bus at least once per week

Enforcement

- Bicycle-mounted police in front of the campus
- Speed feedback signs
T.L. Wagoner Elementary School
*Imperial Unified School District*

**SRTS Workshop**

A SRTS workshop was conducted on May 26, 2015 for the Imperial Unified School District schools. The following key stakeholders from T.L. Wagoner Elementary School attended:

- Parents
- Superintendent
- School resource officer
- Former school board member
- Representative from the Imperial County Transportation Commission
- Representative from the Imperial County Department of Public Health

**Safety Issues Raised at the Stakeholder Workshop**

**General**

- Speeding
- Traffic
- Crosswalks not very visible
- People not obeying stop signs

**Location Specific**

- Joshua Tree St. & Morning Glory
  - too much traffic
  - bottleneck
- Aten Rd. & Sandalwood Glen Ave.
  - no crossing guards
  - no flashing signs
- Joshua Tree St. & Sandalwood Glen Ave.
  - poor visibility at the stop sign
  - needs more visible crosswalk
Maps

There were no recorded bicyclist or pedestrian involved crashes for a five-year period between 2008 and 2012 near this school. (University of California Transportation Injury Mapping System)

The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Crossing Improvements

Joshua Tree St. & Morning Glory Tr.

Existing

- T-Intersection
- 3-way stop
- No marked crosswalk

Proposed

- Add a yellow zebra-stripe crosswalk on the north leg (1)
- Add a raised yellow zebra-stripe crosswalk on the east leg (1)
- Add curb extensions to the north and east legs (2)
- Add advance stop lines to all legs (3)
- Add flashing LED lights to the stops signs (3)
Bicycle Parking

- Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

- Rodeos
- California Highway Patrol instructor

Encouragement

- Classroom prize for the one with the most kids walking/bicycling in a month
- Awards for kids with honor roll and citizenship
- Field trip for participating in safety patrol
- Prizes

Enforcement

- “Caught being good” prizes or awards
- Plain clothes officers
- Add another drop-off zone
- More signs
- More crossing guards
San Pasqual Valley
Unified School District

San Pasqual Elementary School

San Pasqual Middle School

San Pasqual Valley High School
San Pasqual Elementary School, San Pasqual Middle School, San Pasqual Valley High School
San Pasqual Valley Unified School District

Previous and Existing Efforts

The San Pasqual Valley Unified School District produced a SRTS plan in 2011 called the “Fort Yuma Safe Routes to School Project”. This plan proposed a combination of engineering, education, encouragement, enforcement and evaluation strategies. A SRTS Committee was formed to carry out the programs. The strategies are:

Engineering

- A new sidewalk along the south side of Arnold Road
- A paved multi-purpose path along the Cocopah Canal to connect the Mesquite subdivision (approximately 1 mile to the southwest) to the school site
- A paved multi-purpose path to connect the Ironwood subdivision with a cover over the Cocopah Canal
- A speed table in front of the high school to slow traffic

Education

Select one of three programs to used for safety education curriculum:
- “How to Start Your Own Walk to School/Bike to School Safety Program” from Walk Boston
- “Pedal Power Squad” from the Bicycle Transportation Alliance
- “Bicycle-Driver Training Course” from the International Bicycle Fund

Encouragement

- Walk to school days
- Walking Wednesdays
- Walking school buses
- Bike rodeos
- Helmet giveaways
- “Come Play on Our Land Day” with a bicycle obstacle course
- Annual “Ride With Your Child to School Day”
- Seek donations for walking shoes
- “Family Fit Day”
- Speed trailers
- Sherriff speed monitoring at school times
- Publicity of the program and urging for parents to drive safely
- School Resource Officer training
- Promote safety patrols and crossing guards

Evaluation

- Parent surveys
- Regular counts of students walking or bicycling
SRTS Workshop

A SRTS workshop was conducted on April 28, 2015. Since the elementary, middle and high school all share the same grounds the issues were discussed simultaneously. The following key stakeholders attended:

- School superintendent
- Parents
- Students
- A representative from the school SRTS Committee
- County Sherriff
- A representative of the Imperial County Food Bank

Safety Issues Raised at the Stakeholder Workshop

General

- Distance – many students live far away
- Walking along canals – students do it, but are not permitted to because of the danger of falling in
- Crossing canals
- Speeding
- No sidewalks
- No bikeways
- Dogs
- Weather
- There are two primary subdivisions from which students could walk: Ironwood just east of the schools, and another about one mile southwest of the schools

Location Specific

- In front of the school along Baseline Rd.
  - no sidewalk
  - speeding
- Along San Pasqual Rd. from Baseline Rd. to Picacho Rd. (Community Center)
  - no sidewalk
  - no bikeway
  - speeding
- Just east of the schools
  - no way to cross the canal between the Ironwood subdivision and the schools
- Along Arnold Rd. from Baseline Rd. to Ironwood Rd.
  - no sidewalks
  - speeding
Maps

There were no recorded bicyclist or pedestrian involved crashes for a five-year period between 2008 and 2012 near these schools. (University of California Transportation Injury Mapping System)

The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Linear Treatments

Connector Path from Ironwood Subdivision

- Cover the canal (50 feet @ $12,500) just east of the school and pave a path to the Ironwood subdivision (approximately 750').

Multipurpose Path along the Cocopah Canal

- Add a new 12'-wide multipurpose path:
  - along the south side of the Cocopah Canal from Bluestone Dr. to Baseline Rd. at the south end of the school (1 mi.)
  - along the east side of Baseline Rd. from the Cocopah Canal to the one-stop center on school grounds (approximately 750') (the school already has a grant to construct a sidewalk from the one-stop center to Arnold Rd.)

San Pasqual Rd. Widening with Bike Lanes

- Widen the asphalt from 25' to 38' to expand the paved shoulders along San Pasqual Rd. from Picacho Rd. to Base Line Rd. and stripe 6'-wide bike lanes, with 2' painted buffers (1 mi.)

Bicycle Parking

- The schools already have good bike racks. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out as funding becomes available. These include and build on the 2011 SRTS plan.

Education

- Safety education taught by the County Sherriff
- Safety rodeos

Encouragement

- Walk to school days
- Walking Wednesdays
- Walking school buses/ Walking buddy program
- Bike rodeos
- Helmet giveaways
- “Come Play on Our Land Day” with a bicycle obstacle course
- Annual “Ride With Your Child to School Day”
- Seek donations for walking shoes
- “Family Fit Day”
- Contests with prizes
- Gift certificate from Sherriff for wearing a bike helmet
Enforcement

- The County Sherriff periodically patrols the area during pick up and drop off
- Speed trailers
- Publicity of the program and urging for parents to drive safely
- School Resource Officer training
- Promote safety patrols and crossing guards
Seeley Elementary School
Seeley Union School District

SRTS Workshop

A SRTS workshop was conducted on May 12, 2015 for the Seeley Union Elementary School District. The following key stakeholders attended:

- School principal
- Students
- Representative from the Imperial County Transportation Commission
- Representative from the Southern California Association of Governments
- Representatives from the Imperial County Department of Public Works
- Representative from the Imperial County Department of Public Health

Safety Issues Raised at the Stakeholder Workshop

General

- Lack of sidewalks
- Dogs
- People not stopping for bicycles

Location Specific

- Lack of sidewalks at the following locations
  - Along both sides of Rio Vista St. from Laguna Ave. to Holt Ave.
  - Along the south side of El Centro St. from Haskell Ave. to Holt Ave.
  - Along the west side of Haskell Rd. from Rio Vista St. to Evan Hewes Hwy.
  - Along the east side of Haskell Rd. from Park St. to Evan Hewes Hwy.
  - Along both sides of Even Hewes Hwy. from Signal Ave. to Haskell Rd.
- Speeding along Rio Vista Ave.
- Speeding along El Centro St.
- Speeding along Haskell Rd.
- No stop signs along Rio Vista Ave. at Holt Ave. and Imperial Ave.
Maps

The following map displays bicyclist and pedestrian involved crashes for a five-year period between 2008 and 2012.
The map below shows the proposed engineering projects along common routes used by students to get to school.
Existing Conditions and Engineering Recommendations

Linear Improvement

Rio Vista St. from Laguna Ave. to Holt Ave.

- Add sidewalks on both sides of Rio Vista St. from Laguna Ave. to Holt Ave. (approximately 6,000’)

Bicycle Parking

- Add racks for 30 bicycles as described in the Design Guidance section. Add racks for 30 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

- State Highway Patrol has come to give bicycle safety education; the teacher moved but the school would like to keep this program going
- Rodeos

Encouragement

- International Walk-to-School Day
- Walking school bus
- Individual competitions with prizes

Enforcement

- Crossing guards
- Sherriff patrol
Westmorland Elementary School
Westmorland Union Elementary School District

SRTS Workshop

A SRTS workshop was conducted on April 30, 2015 for the Westmorland Union Elementary School District. The following key stakeholders attended:

- School principal
- Parents
- Grandparents
- Crossing guards
- City Councilmember
- Representative from State Assemblymember Garcia’s office
- Representative from State Senator Hueso’s office

Safety Issues Raised at the Stakeholder Workshop

General

- Crossing a major street
- Speeding
- Motorists not stopping for pedestrians in the crosswalk
- People using mobile phones
- People not obeying crossing guards

Location Specific

- The crossing of Main St. (SR-86) at C St. in front of the school is difficult because the cars are going fast
- There are no sidewalks along Isis Ave.
- The intersection of 3rd St. and Center St. is sometimes busy and is uncontrolled: there is a crossing guard there
- The crossing of Main St. (SR-86) at G St. has no marked crosswalk and the cars are going fast
Maps

There were no recorded bicyclist or pedestrian involved crashes for a five-year period between 2008 and 2012 near this school. (University of California Transportation Injury Mapping System)

The map below shows the proposed engineering projects along common routes used by students to get to school.
**Existing Conditions and Engineering Recommendations**

**Crossing Improvement**

**Main St. (SR-86) and C St.**

Existing

- Uncontrolled yellow ladder crosswalk on south leg crossing SR-86

Proposed with Option 1 Main St. Reconfiguration

- Add rumble bars to both approaches to the crosswalk (3 sets on each side)
- Add advance yield lines to both approaches to the east leg crosswalk (2)
- Add R1-5 signs to both approaches to the east leg crosswalk (2)
- Add Assembly B and D signs to both approaches to the east leg crosswalk (2)
- Add rapid-flash beacons (1 set)
- Add curb extensions in the parking lane to the east leg (2)
- The new median will function like crossing islands
- The new protected bike lanes will have protection on both sides of the crosswalk to further protect pedestrians

Proposed with Option 2 Main St. Reconfiguration

- Add rumble bars to both approaches to the crosswalk (3 sets on each side)
- Add advance yield lines to both approaches to the east leg crosswalk (2)
- Add R1-5 signs to both approaches to the east leg crosswalk (2)
- Add Assembly B and D signs to both approaches to the east leg crosswalk (2)
- Add rectangular rapid-flash beacons (1 set)
- Optional: instead of rectangular rapid-flash beacons, add a hybrid beacon (1)
- The new median will function like crossing islands
- The new protected bike lanes will have protection on both sides of the crosswalk to further protect pedestrians

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**Option 1**

**Option 2**
Linear Improvement

Main St. (SR-86) from H St. to B St. (0.5 mi.)

Existing

- 77’ curb-to-curb, 4 lanes, center-turn lane
- 20’ #2 lane, 12’ #1 lane, 13’ center-turn lane, 12’ #1 lane, 20’ #2 lane

Proposed Option 1

- Reconfigure with road diet to: 6’ protected bike lane, 3’ protective buffer, 8’ parking lane, 11’ travel lane, 10’ center-turn lane, 11’ landscaped median, 11’ travel lane, 8’ parking lane, 3’ protective buffer, 6’ protected bike lane
- Gateways at B St. and H St. (2)
- Speed feedback signs (2)

Proposed Option 2

- Reconfigure to: 6’ protected bike lane, 3’ protective buffer, 11’ #2 lane, 10’ #1 lane, 10’ center-turn lane, 7’ landscaped median, 10’ #1 lane, 11’ #2 lane, 3’ protective buffer, 6’ protected bike lane
- Add gateways at B St. and H St. (2)
- Add speed feedback signs (2)
Imperial County Safe Routes to School Plan

Existing

Option One

Option Two
Bicycle Parking

• Add racks for 10 bicycles as described in the Design Guidance section. Add racks for 10 skateboards/scooters. Add more if needed.

Program Plan

At the SRTS workshop attendees discussed existing programs and what types of programs might be successful in the future. The details will need to be worked out with funding and through a SRTS Committee.

Education

• Bicycle and pedestrian safety education; involve both students and parents
• Pedestrian safety education; involve both students and parents
• Bicycle and pedestrian rodeos
• Distribute printed materials

Encouragement

• Monthly walking events
• International Walk-to-School Day
• Contests with prizes

Enforcement

• Crossing guards (3)
• Speed feedback signs
• Dummy cop car at the edge of town
• Photo enforcement of speeding along Main St.
6. Funding & Implementation

6.1. Funding Sources

A variety of potential funding sources, including local, state, regional, and federal funding programs, may be used to construct the proposed bicycle and pedestrian improvements. Most of the Federal and State programs are competitive, and involve the completion of extensive applications with clear documentation of the project need, costs, and benefits. Local funding for projects can come from sources within jurisdictions that compete only with other projects in each jurisdiction’s budget. A detailed list of available funding programs along with the latest relevant information follows.

In order to plan an implementation schedule we assume that Imperial County will receive its fair share of predictable funding programs based on population. Imperial County is home to 0.6% of California’s population so we assume that it will receive this amount of state funding.

Federal Funding

Fixing America’s Surface Transportation (FAST) Act & Moving Ahead for Progress in the 21st Century (MAP-21) Act

Passed in December 2015, the Fixing America’s Surface Transportation (FAST) Act is five-year legislation starting in the current Federal fiscal year, FY2016 to improve the Nation’s surface transportation infrastructure, including our roads, bridges, transit systems, and rail transportation network. Over the five-year period, $305 billion in spending has been set aside.

As of this writing the FAST Act was very recently passed and some details are not yet available. Preliminary information suggests that the Moving Ahead for Progress in the 21st Century Act (MAP-21) programs were folded into the FAST Act. This includes programs for walking and bicycling.

MAP-21 passed in June 2012 and set the framework for spending federal transportation revenue. MAP-21 put a majority of pedestrian and bicycle funds into one Transportation Alternatives Program (TAP).

Assuming MAP-21 projects were carried over under the FAST Act, bicycling and walking projects are also eligible for the following core programs: National Highway Performance Program (NHPP), Surface Transportation Program (STP), Highway Safety Improvement Program (HSIP), and Congestion Mitigation and Air Quality Improvement (CMAQ), and Metropolitan Planning. Biking, walking, and trails projects are also eligible for a handful of other programs such as Scenic Byways funds, Transportation, Community, and System Preservation Program (TCSP), and Tribal High Priority Projects.

The biggest change to these programs in the FAST Act is that the STP is renamed the Surface Transportation Block Grant (STBG) program and the TAP becomes the Surface Transportation Block Grant Set-aside Program (STBGSP). Walking and bicycling projects remain an eligible activity for the larger STBG as well as others such as CMAQ and HSIP.

The FAST Act also creates a priority safety fund to focus on education and enforcement programs that reduce pedestrian and bicycle fatalities. Only states in which 15% or more of overall fatalities are bicyclists or pedestrians will receive funds. California is one of these states and should be eligible.

Under the FAST Act, funding is administered by the California Department of Transportation (Caltrans) and the local metropolitan planning organizations (MPOs). Each state has its own
method for distributing federal funds. California folds its STBG funds and STBGSP into an Active Transportation Program (ATP).

More information can be found at:
https://www.fhwa.dot.gov/fastact/
http://www.fhwa.dot.gov/map21/summaryinfo.cfm

Highway Safety Improvement Program (HSIP)

The Highway Safety Improvement Program (HSIP) was adopted under the FAST Act, which replaced MAP-21. It aims to achieve a significant reduction in traffic fatalities and serious accidents through the implementation of infrastructure-related highway safety improvements. These improvements may be on any public road or publicly owned bicycle and pedestrian pathway or trail, and can include the use of devices such as traffic signals, curb extensions, and crosswalks. Assuming that the following was adopted under the FAST Act, MAP-21 requires states to focus funds on improvements for pedestrians and the elderly if crashes among these groups are not below a threshold level.

Applications are submitted electronically, and must demonstrate that the proposed engineering improvements will increase the safety of the proposed project area. These are calculated in the application program using Crash Reduction Factors with accompanying financial values. Project areas that have a prior history of injuries or fatalities are more likely to be funded.

In Cycle 7 (2015), HSIP assigned approximately $158 million of funds for successful projects. We can reasonably expect the same amount of funding to be available for Cycle 8.

Caltrans releases HSIP funds approximately every two years. For the purposes of this Implementation Plan, we assume $158 million dollars will be available every two years ($79 million per year). If Imperial County gets its fair share based on population, we will plan on receiving $474,000 per year.

More information can be found at: http://www.dot.ca.gov/hq/LocalPrograms/hsip.htm

Transportation, Community, and System Preservation Program (TCSP)

This program was authorized under MAP-21. Assuming it was adopted under the FAST Act, the Transportation, Community, and System Preservation Program (TCSP) provides federal funding for projects that improve the efficiency of the transportation system, reduce the impact on the environment, and generally investigate the relationships between transportation, community and system preservation. Eligible projects include improving conditions for bicycling and walking, better and safer operations of existing roads, new signals, and development of new programs. States, MPOs and local jurisdictions are eligible to apply for the discretionary grants. Grantees must annually report on the status of the project and the degree to which the project is attaining the stated goals. The report must include quantitative and qualitative assessments. The FHWA solicits a call for grant applications annually.

Given that this funding source is less predictable than the others, we will not include it in our calculation of annual funds for the implementation plan.

More information can be found at: http://www.fhwa.dot.gov/tcsp/index.html

Community Development Block Grants (CDBG)

The CDBG entitlement program allocates annual grants to larger cities and urban counties to develop viable communities by providing decent housing, a suitable living environment, and
opportunities to expand economic opportunities, principally for low- and moderate-income persons. Every year the local governments receive federal money for a wide variety of community improvements in the form of CDBG funds. Bicycle and pedestrian facilities are eligible uses of these funds.

CDBG funds only pay for projects in areas of economic need. No match is required.

Given that this funding source is less predictable than the others, we will not include it in our calculation of annual funds for the implementation plan.

More information can be found at: www.hud.gov/cdbg

Land and Water Conservation Fund (LWCF)

States receive individual allocations of Land and Water Conservation Fund (LWCF) grant funds based upon a national formula, with state population being the most influential factor. States initiate a statewide competition for the amount available annually. The State then scores, and ranks applications according to certain project selection criteria so that only the top-ranked projects (up to the total amount available that year) are chosen for funding. Chosen applications are then forwarded to the National Park Service for formal approval and obligation of federal grant monies. Bike paths and recreational trails are eligible uses of this money. Cities, counties, recreation and park districts, and any other entity that has the authority to develop or maintain a public park is eligible to apply. This program is a reimbursement program, and the applicant is expected to initially finance the entire project. A one for one match is required, and federal funds cannot be used as a match, except Community Development Block Grants. The California State Parks Department administers these state funds.

Given that this funding source is less predictable than the others, we will not include it in our calculation of annual funds for the implementation plan.

More information can be found at: http://www.parks.ca.gov

Rivers, Trails, and Conservation Assistance Program (RTCA)

The Rivers, Trails, and Conservation Assistance Program is the community assistance arm of the National Park Service. RTCA provides technical assistance to communities in order to preserve open space and develop trails. The assistance that RTCA provides is not for infrastructure, but rather building plans, engaging public participation, and identifying other sources of funding for conservation and outdoor recreation projects.

Given that this funding source is less predictable than the others, we will not include it in our calculation of annual funds for the implementation plan.

More information can be found at:
http://www.nps.gov/orgs/rtca/index.htm
http://www.nps.gov/orgs/rtca/apply.htm

State Funding Programs

Active Transportation Program (ATP)

The Active Transportation Program (ATP) results from Senate Bill 99, Chapter 359, and Assembly Bill 101, Chapter 354 that passed and was signed by Governor Brown. The purpose of ATP is to increase the use of active modes of transportation by funding projects that improve options.
ATP combines the federal TAP funds with former statewide bicycle, pedestrian, and Safe Route to School programs. ATP funds are available for design and construction of any bicycle or pedestrian project, including infrastructure projects, plans, and non-infrastructure projects. Capital improvements such as environmental design, right-of-way, and construction are eligible. ATP will fund the following plans, such as the development of a community wide bicycle, pedestrian, safe routes to school, or active transportation plan in a disadvantaged community. ATP will also fund non-infrastructure projects, including education, encouragement, and enforcement projects.

The ATP increased funding for bicycle and pedestrian projects. Caltrans has administered two cycles of ATP programs as of 2015. The funds are distributed through competitive grants with the following formula:

- 40% to Metropolitan Transportation Organizations in urban areas with populations greater than 200,000
- 10% will funnel to small urban and rural areas with 200,000 or fewer people
- 50% will be available statewide in competitive grants

Because of preference given to disadvantaged communities, and the fact that Imperial County has the Safe Routes to School Plan, it should be able to attract more funds than the statewide average. For purposes of this estimates, conservatively, Imperial County should be able to receive 0.6% of state funds. Caltrans has allocated $120 million dollars per year, so Imperial County may receive $720,000 per year.

More information can be found at: http://www.dot.ca.gov/hq/LocalPrograms/atp/

Office of Traffic Safety (OTS)

The California Office of Traffic Safety (OTS) seeks to reduce motor vehicle fatalities and injuries through a national highway safety program. Priority areas include police traffic services, alcohol and other drugs, occupant protection, pedestrian and bicycle safety, emergency medical services, traffic records, roadway safety, and community-based organizations.

The OTS provides grants for one to two years. The California Vehicle Code (Sections 2908 and 2909) authorizes the apportionment of federal highway safety funds to the OTS program. Bicycle safety programs are eligible programs for OTS start-up funds. City and county agencies are eligible to apply, as are councils of governments. There is no set maximum for grants, and no match is required; however, contributions of other funds may make projects more competitive.

Caltrans has allocated $120 million per year for ATP programs. We assume that Imperial County will receive 0.6% of this, which is $720,000.

More information can be found at: http://www.ots.ca.gov/Grants/

Local Funding

Measure D

Adopted in 1989, Measure D is a half-cent transportation sales tax that has generated more than $140 million for county transportation improvement projects. 95% of the funds collected go directly to the cities and County to pay for critical road repair projects, and the remaining 5% is targeted for regional projects including transit services and state highway purposes. The half-cent sales tax is enacted for 40 years and funds the majority of road repairs possible for local cities and the County.
Given that most of the funding will be dedicated to resurfacing, we assume that very little will be spent on Safe Routes to School projects but the local jurisdictions will have that option. Cities could choose to install any device with paint or thermo plastic (bike lanes, crosswalks, advance stop lines, etc.) at the time of resurfacing with these funds. This would be the least expensive time to do this.

More information can be found at: http://www.imperialctc.org/about-lta/

**Resurfacing and Repaving**

Imperial County cities and the County are able to add bicycle lanes, sharrows, and striping upon resurfacing and repaving of streets. While other lanes are restriped, the bike facilities can be painted as well. This has potential to reduce the costs of these facilities that require paint (thermoplastic or other options).

**New Construction**

Future road widening and construction projects are one means of providing bike lanes and sidewalks. To ensure that roadway construction projects provide bike lanes where needed, it is important that an effective review process is in place to ensure that new roads meet the standards and guidelines presented in this master plan. Developers may also be required to dedicate land toward the widening of roadways in order to provide for enhanced bicycle mobility. This has the potential to reduce the costs of putting these facilities in, but this is not factored into the implementation schedule.

More information can be found in the Caltrans Complete Streets Implementation Action Plan 2.0: http://www.dot.ca.gov/hq/tpp/offices/ocp/docs/CSIAP2_rpt.pdf

**General Funds**

Imperial County cities and the County may spend general funds as they see fit. Any bicycle, pedestrian, or trails project can be funded completely through general funds, or general funds can be used as a local match for grant funds.

Given that Imperial County jurisdictions are financially strapped, we assume that very little will be spent on Safe Routes to School projects but the local jurisdictions will have that option.
6.2. Implementation Schedule

Total Project Costs by Jurisdiction

The following table describes the total project costs in each of the nine jurisdictions in Imperial County. The project costs include infrastructure costs for pedestrian and bicycle improvements, as well as bicycle and skateboard parking costs. The total cost of all the projects for all of Imperial County is $20,938,250.

Table 6.2.1. Total Project Costs by Jurisdiction

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<th>Jurisdiction</th>
<th>School District</th>
<th>Total Project Cost</th>
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<tr>
<td></td>
<td></td>
<td><strong>Total Costs</strong></td>
</tr>
</tbody>
</table>
                                                                 | **$20,938,250**
Total Fair-Share Annual Funding

Given the total cost of $20,938,250 for all the projects, it would take 22 years to fund with reliable funding sources assuming Imperial County gets its fair share based on population. As shown in Table 6.2.2. below, we will assume that $1,213,000 of federal and state funding is available for Imperial County each year. Programmatic costs amount to $250,000 per year, which leaves $963,000 per year for infrastructural improvements and bicycle/skateboard parking. In five-year increments, $4,815,000 worth of projects can be funded.

These costs are calculated in 2016 dollars. Imperial County should be able to use additional funds listed under “Funding Sources” on page 286, but for implementation purposes we are only assuming funds that are more readily predictable.

Table 6.2.2. Total Fair-Share Annual Funding

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Funds/Year (2016 $)</th>
<th>5-year Funds (2016 $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATP</td>
<td>$720,000</td>
<td>$3,600,000</td>
</tr>
<tr>
<td>OTS</td>
<td>$19,000</td>
<td>$95,000</td>
</tr>
<tr>
<td>HSIP</td>
<td>$474,000</td>
<td>$2,370,000</td>
</tr>
<tr>
<td>Subtotal</td>
<td>$1,213,000</td>
<td>$6,065,000</td>
</tr>
<tr>
<td>Programmatic Costs</td>
<td>($250,000)</td>
<td>($1,250,000)</td>
</tr>
<tr>
<td><strong>Total Funding Available</strong></td>
<td><strong>$963,000</strong></td>
<td><strong>$4,815,000</strong></td>
</tr>
</tbody>
</table>
6.3. Prioritizing Projects

Prioritizing projects requires weighing a number of factors and data sources. The method used for this Plan incorporates the following:

- **Crashes** indicate a safety need and factor directly in Highway Safety Improvement Program funds. Very few project locations have experienced pedestrian or bicycle crashes in the five-year period from 2009 through 2013. This is the last five-year period that the Transportation Injury Mapping System has full data.

- The **number of lanes** indicate the need of the project. If students have to cross more lanes, the need is greater. If we add bike lanes they are more needed on streets with more lanes, and likely more traffic.

- The **number of students** enrolled at each school indicates the potential number of people who might use the improvements.

- The **level of the adjacent school** indicates a need as elementary students are less capable of safely navigating streets than middle or high school students. The matrix assigns a higher score for the younger the students.

Table 6.3.1. and 6.3.2. below display the scoring factors. The result is the Table E in Appendix E that shows each of the planned projects in order of priority. Within each of these, local jurisdictions can select which they wish to apply for funds first. The priority system links to an implementation schedule. However, this is not set into stone. Whenever a street project arises, for example, it makes sense to incorporate the planned projects regardless of their priority level.

### Table 6.3.1. Street Types and Scoring

<table>
<thead>
<tr>
<th>Street Types</th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 2</td>
<td>2 lane streets every direction</td>
<td>1</td>
</tr>
<tr>
<td>2, 3</td>
<td>2 lane street crossing 3-lane street</td>
<td>2</td>
</tr>
<tr>
<td>2, 4</td>
<td>2 lane street crossing 4-lane street</td>
<td>3</td>
</tr>
<tr>
<td>4, 4</td>
<td>4 lane streets in each direction</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>2 lane street (linear improvement)</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>4 lane street (linear improvement)</td>
<td>4</td>
</tr>
<tr>
<td>State Highway</td>
<td>Linear Improvement</td>
<td>6</td>
</tr>
<tr>
<td>State Highway Crossing</td>
<td>Crossing Improvement</td>
<td>6</td>
</tr>
</tbody>
</table>
Table 6.3.2. Scoring System of the Number of Crashes, Number of Students and School Level

<table>
<thead>
<tr>
<th>Number of Crashes</th>
<th>Number of Students</th>
<th>School Level (Elementary – ES, Middle – MS, High - HS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Score</td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-599</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>600-1099</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1100-2005</td>
</tr>
</tbody>
</table>
7. Transportation Demand Management Benefits Summary

Active transportation can bring many benefits to children, residents, communities, and to society at large that provide attractive mobility options. The following text describes the primary benefits for each of those.

7.1. Benefits to Individuals

Health

By creating safe, convenient options to walk, bicycle and use other forms of active transportation, people can integrate physical activity into their daily lives without having to set aside a special time of the day for exercise. These aerobic activities all burn calories, enabling people to maintain a healthy weight and improve mental health. For example, a 160-pound adult, walking at 3.5 miles per hour for one hour burns 314 calories, and running at 8 miles per hour for one hour burns 861 calories (Mayo Clinic website). A 130-pound person bicycling at 14-16 miles per hour for one hour burns about 590 calories. (Bicycling Magazine Cycling Calories Burned Calculator). Burning 500 calories per day will translates into 1 pound lost per week (Mayo Clinic website).

In addition, children that walk or bicycle to school are often healthier than their peers that are driven. Because of this, they also miss fewer days of school, are more alert in class and perform better academically.

Safety

By providing bikeways, improved pedestrian crossings, and safer routes to school, children and residents will be able to walk and cycle in a safer environment. Improved pedestrian facilities reduce the number of pedestrians hit by cars. For example, adding a sidewalk to a street without one has a crash reduction factor of 88% (Federal Highway Administration Pedestrian Safety Design course). Crossing islands reduce pedestrian-involved crashes by 46% at marked uncontrolled (no signals or stop signs) crossings. (Zegeer, C., J. Stuart, and H. Huang, Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Crossing Locations, Federal Highway Administration, Washington, DC, 2001).

Speed is a key factor in crash reduction. Bike lanes, new sidewalks and new parkways also have the potential to reduce the speed of cars some by narrowing the travel lanes. Last, there is safety in numbers. The more people there are using local streets and bikeways, the more people will be aware and will look for them.

Enjoyment

People who use pedestrian facilities and bikeway networks gain a significant opportunity to enjoy outdoor recreation. They are able to go out to enjoy the network on their own, and may find that the facilities offer a terrific chance to spend time together with family. Polls show that residents greatly value pedestrian facilities and bikeways in their communities. Best of all, these facilities can be enjoyed by people of nearly all ages.

Cost Savings

Children and local residents that walk or bicycle for daily trips to the school, work or other destinations can realize costs savings by not using their cars. The average cost to operate a car is 60.8 cents per mile (“Cost of Owning and Operating Vehicle in US Increases Nearly Two Percent According to AAA’s 2013 ‘Your Driving Costs’ Study”, AAA Newsroom, April 16, 2013). Reducing driving by just five miles per day would save someone $1,110 a year on average.
Cost savings also result from better health. For example, the yearly cost of being overweight is $524 for women and $432 for men. The annual cost of obesity is $4,879 for women and $2,646 for men. (Dor, Avi, Christine Ferguson, Casey Langwith, and Ellen Tan. A Heavy Burden: The Individual Costs of Being Overweight and Obese in the United States. Washington, DC: The George Washington University School of Public Health and Health Services Department of Health Policy; 2010).

**Stress Relief**

“Exercise in almost any form can act as a stress reliever. Being active can boost your feel-good endorphins and distract you from daily worries” (Mayo Clinic website). Having attractive bikeways and pedestrian facilities can entice more people to get outside and become more active. This will relieve stress and improve users’ mood. This will simply make people happier and make the communities they live in more livable.

**7.2. Benefits to Communities**

**Healthier Communities**

Cities benefit by offering attractive active transportation options. Based on a 2014 general health poll, 167,000 Imperial County residents rated their general health status: 22.1% responded excellent, 21.4% very good, 34.3% good, 17.9% fair, and 4.2% fair (2014 California Health Interview Survey; http://ask.chis.ucla.edu/).

Bikeways and good sidewalk systems have potential to change the way of life. Complete networks encourage people to use a bicycle more often for transportation, or to walk for short trips. As more people do so, a cultural shift may take place. Although difficult to measure, schools may experience less absenteeism. If students perform better local schools may improve their test scores.

**Safer Communities**

Bikeways, trails and pedestrian improvements make communities safer places to bicycle and walk. In addition, local drivers will become more accustomed to seeing bicyclists and pedestrians, look for them and expect them more.

Where traffic calming measures are implemented the slower speeds can reduce the number of crashes as well as crash severity, as described in the Benefits to Individuals section above.

Added safety benefit comes from numbers. As more people are out and able to see street activity, criminals are less likely to partake in anti-social activity. As more people get out, others may feel safer and walk or bicycle more themselves.

**Economic Development**

Bikeways and pedestrian networks can give communities a reputation as livable communities. Local residents may choose to do more of their shopping and entertainment at home, rather than travelling to another city. Moreover, if they save money by driving less, they will have more disposable income that could be used locally.

Studies have concluded that places that are more pedestrian and bicycle-friendly perform better commercially and have higher housing values. For example, a recent study along York Boulevard in the SCAG region documented increased sales tax revenues after reducing the number of
driving lanes and adding bicycle lanes (McCormick & Affairs, 2012). In Ohio, sale prices for single-family residential homes increased by $7.05 for every foot, or over $41,000 for every mile closer that a property is located to the Little Miami Scenic Trail (Karadeniz, 2008; Alliance for Bicycling and Walking Benchmarking Report, 2014). Other studies have confirmed that pedestrians and bicyclists make more purchases than those travelling by car. A study in Portland, Oregon shows that although pedestrians and bicyclists may spend less per trip to a store, they make more frequent visits throughout a given month and result in spending more on average than their car-driving counterparts (Clifton, 2013; Alliance for Bicycling and Walking Benchmarking Report, 2014). These are just a few of many examples that have documented various types of economic development through active transportation.

Economically Viable Futures

Smaller US cities and towns are having difficulty keeping and attracting vibrant industries and a millennial workforce. This “brain drain” is negatively impacting smaller cities. Many millennials want a more “urban” lifestyle where they can live in compact, walkable, bikeable communities. (Beau Dure, “Millennials Continue Urbanization of America, Leaving Small Towns,” National Public Radio, October 21, 2014.) If smaller cities expect to retain and attract the next generation of workers, and if they want to attract growth industries, planning for denser, walkable and bikeable communities seems like a smart formula.

7.3. Benefits to Society at Large

Potential

Many trips we take are short and could be done on foot or bicycle if attractive facilities were available. When we consider that in Southern California, about 38% of all trips in the region are 3 miles or less but more than 78% of these trips are made by driving, there is significant potential to convert these trips (SCAG RTP/SCS, 2016).

The weather in the Southern California region is conducive to walking and bicycling in most areas throughout the year. Currently, 37% of all trips less than one mile and 18% of all trips less than three miles are taken by walking and bicycling (SCAG RTP/SCS, 2016). Of all the trips taken in Imperial County, 1.43% of trips are done by bike, while 7.8% of trips are done by walking (SCAG RTP/SCS, 2016). Where better pedestrians and bikeway facilities are implemented, it would be convenient and safer for more children to walk and bike to school.

Fewer Greenhouse Gas Emissions

As children and residents decide to walk or bicycle to school, work or for other purposes instead of driving, greenhouse gas emissions will decrease. For every one-mile trip that is converted from a motorized trip to a non-motorized trip, an average of 0.79 pounds of CO2 is reduced. (Using US Environmental Protection Agency data). If done everyday, over the course of a year, this translates to about 31,400,000 tons reduced per year in the US.

Air Quality Improvement

As children and residents decide to walk or bicycle to school instead of driving, air quality will improve. It is important to note that since most bicycling and walking trips to school are short, walking or cycling eliminates “cold starts”, the most polluting portion of the trip. Since the calculations above used averages, the actual reductions would likely be significantly higher.
Lower Societal Health Costs

Obesity-related ailments, such as chronic disease, disability and death are estimated to cost $190.2 billion annually. (Institute of Medicine of the National Academies, Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation. Report brief, May 8, 2012.) To the degree that healthier communities reduce the number of children and residents with diabetes, cancer, heart problems, hypertension and others, significant costs will be saved.

Energy Savings

As children decide to walk or bicycle to school instead of driving, energy will be saved. For every one-mile trip that is converted from a motorized trip to a non-motorized trip, an average of 0.04 gallons of gasoline will be saved. If done everyday, over the course of a year, this translates to 15 gallons saved per driver.
8. Design Guidance

Many traffic control devices, signs, markings, and other street design features can be used to make walking and bicycling to school safer. This section highlights some of the most important and most commonly recommended.


The California MUTCD has developed standards and guidance to be used for signs and markings. Some are mandatory, others are advisory, and some are optional. The following subsection shows the basic signs and markings used around schools.

**Signs**

<table>
<thead>
<tr>
<th><strong>SR1-1</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Many school signs begin with the basic School Advanced Warning sign labeled “S1-1”. It is used to notify street users that they are entering a School Area that includes school buildings or grounds, a school crossing, or a related activity adjacent to the street. It can identify the location of the beginning of a School Zone. It also combines with other signs to designate the location of school crossings.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Assembly A</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The School Warning Assembly A includes the School (SP-4) plaque. This should be posted at the school boundary, and may be posted up to 500 feet in advance of the school boundary. It may also be accompanied with arrows pointing to the school if on another street.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Assembly B</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The School Crosswalk Warning Assembly B includes S1-1 with an arrow. It shall be posted at a crosswalk that is not controlled by a stop sign or traffic signal.</td>
</tr>
</tbody>
</table>
Assembly D

The School Advanced Warning Assembly D includes the S1-1 sign along with either Ahead (W16-9P) or a distance sign e.g. “200 FT” (W16-2aP). It should be used on the approach of a crosswalk that is not controlled by a stop sign or traffic signal. It is optional where an S1-1 sign is posted. It may also be accompanied with arrows pointing to the school if on another street.

Assembly C

The School Speed Limit Sign (Assembly C) includes a Speed Limit (R2-1) sign, with a School (S4-3P) sign, and When Children Are Present (S4-2P). The Assembly C sign should be used where a reduced school speed limit zone has been established based on an engineering study or where a reduced school speed limit is specified by statute. The sign should be placed where the reduced school speed limit exists. It may be placed up to 500 feet in advance of the school boundary. The sign should be used on streets where speed limits contiguous to a school or school grounds are greater than 25 mph. The prima facie speed limit of 25 mph is in effect for Assembly C. With an engineering study (designated by the CA MUTCD) a city may reduce the school speed limit to 15 mph on a residential street where some other conditions are met.

R1-6

In-Street signs (R1-6) may include a School (S4-3P) and be placed in a crosswalk that is not controlled by a traffic signal. These are useful where speeding is a problem.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R1-5</strong></td>
<td>Yield Here to Pedestrians (R1-5) signs should be placed at the location of Advanced Yield Lines.</td>
</tr>
<tr>
<td><strong>W82-1</strong></td>
<td>Railroad warning signs (W82-1) can be used to alert pedestrians of railroad crossings.</td>
</tr>
<tr>
<td><strong>R15-8</strong></td>
<td>Alternatively R15-8 signs may be used.</td>
</tr>
</tbody>
</table>
Markings

**High-visibility crosswalks** generally have longitudinal lines that run in the same direction as the street. They are sometimes called “zebra-stripe” crosswalks, or “continental” crosswalks. If they have lateral (transverse) lines along with longitudinal lines they are called “ladder” crosswalks. Motorists can see these much better than typical transverse-line or “transverse” crosswalks.

Crosswalks must be yellow where the street is contiguous to a school building or school grounds. It may be yellow if it is within 600 feet of the school grounds. If there are no other crosswalks between the intersection and school, the crosswalk may be yellow up to 2,800 feet from the school grounds. However, white crosswalks may be more visible than yellow crosswalks especially when the markings fade, so it may be advisable to color them white where away from school grounds.

**SLOW SCHOOL XING markings** may be used in advance of yellow school crosswalks where there are not stop signs, traffic signals or yield signs. They shall be yellow with the word XING at least 100 feet in advance of the crosswalk.

**SCHOOL markings** may be used with School Assemblies A or C and shall be yellow. It should be adjacent to the signs. It should not be used where SLOW SCHOOL XING markings exist.

**Advance Yield Lines** indicate where users of the streets are required to yield to pedestrians in an upcoming crosswalk. They may be used in advance of marked crosswalks at locations not controlled by a stop sign or traffic signal. They are white and are designed as “shark’s teeth”. They shall be placed between 20 and 50 feet in advance of the crosswalk and parking shall be prohibited between the markings and the crosswalk. They are marked along with posting of R1-5 signs.
**Advance Stop Lines** indicate where users of streets are required to stop where there are marked crosswalks with stop signs or traffic signals. They should be placed at least four feet in advance of the marked crosswalk. They shall be white.
8.2. Other Devices

Curb Extensions

Curb extensions are used to shorten the crossing distance for pedestrians, to improve visibility, and to slow turning motorists. They provide space and geometry for perpendicular curb ramps. They are also called “curb extensions” at intersections. Curb extensions may be irregular in shape to fit into the context. They may be solid and flush with the curb (shown in next photograph), or broken up into islands to compensate for drainage issues as shown in the diagram.

Crossing Islands

Crossing islands break up the distance pedestrians have to cross streets into two phases. This allows them to wait for a gap in traffic to cross in one direction only at a time. They are especially important to cross multi-lane streets at locations not controlled by stop signs or traffic signals.
Raised Crosswalks

Raised crosswalks slow traffic, improve visibility and make pedestrians more prominent. They are especially useful at crosswalks that are not controlled by traffic signals.

Bike Racks

Bicycle racks should support bicycles well and provide a convenient location to lock up. Generally, “inverted-U” racks are widely used because they incorporate these two attributes. Inverted-U racks, or something similar, are recommended.